

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name DecoGel™ Concrete Acid Stain (Avocado) **Item**

Product Use Concrete Stain & Dye

Company Name Direct Colors LLC **Office** (877) 255-2656 ext.1
430 E 10th St
Shawnee OK 74801 **Web** www.DirectColors.com

EMERGENCY TELEPHONE NUMBER **INFOTRAC** (800) 535-5053

SECTION – 2 HAZARDS INFORMATION

Pictogram



Signal Word Danger

Hazards **PHYSICAL / HEALTH / ENVIRONMENTAL HAZARD STATEMENTS**

May be corrosive to metals
Causes severe skin burns and eye damage
Causes serious eye damage
May cause respiratory irritation
Toxic to aquatic life
Toxic to aquatic life with long lasting effects

HAZARD CATEGORY CLASSIFICATION **CODE**

Category 1 Corrosive to Metals H290
Category 1B Skin & Eye (Corrosion) H314
Category 1 Eye (Damage / Irritation) H318
Category 3 STOT Single Exposure H335
Category 2 Acute Toxicity (Aquatic) H401
Category 2 Chronic Toxicity (Aquatic) H411

Precautions **HANDLING / PROTECTION / FIRE / STORAGE / DISPOSAL**

Keep out of reach of children P102
Keep only in original container P234
Avoid breathing dust / fume / gas / mist / vapours / spray P261
Do not get in eyes, on skin, or on clothing P262
Wash thoroughly after handling P264
Do not eat, drink or smoke when using this product P270
Use only outdoors or in a well-ventilated area P271
Avoid release to the environment P273
Wear protective gloves / protective clothing / eye protection / face protection P280
In case of inadequate ventilation wear respiratory protection P285
Absorb spillage to prevent material damage P390
Collect spillage P391
Store in a well-ventilated place, Store locked up, Keep container tightly closed P403+P405+P233
Store in corrosive resistant container P406
Dispose of material in accordance with all State and Federal Guidelines and Regulations P501

SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
Iron(III) Chloride	Ferric Chloride Anhydrous	7705-08-0		1 - 10%
Copper(II) Chloride Dihydrate	Cupric Chloride Dihydrate ; Copper Chloride	10125-13-0		1 - 30%
Hydrochloric Acid	Muriatic Acid	7647-01-0	Water < 70%	1 - 15%

SECTION – 4 FIRST AID MEASURES

Eye Contact Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room

Skin Contact Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Be sure to remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention

Inhaled Move person to fresh air, if they have problem breathing, show signs of overexposure or feel unwell obtain medical attention, Only give artificial respiration if breathing has stopped. Do not use mouth-to-mouth method if victim ingested or inhaled the substance, Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device

Ingested DO NOT INDUCE VOMITING, rinse mouth with water, and drink small quantities of water, Call a physician, or poison control center, and get medical attention, If victim feels nauseous stop drinking, If vomiting occurs, keep head below hips to prevent aspiration into the lungs

Important Effects	Exposure can / may affect, blood, digestive system, eyes, kidneys, liver, nasal septum, respiratory, skin, spleen
Important Symptoms	Symptoms may include, liver or kidney irregularities, digestive tract burns, corrosive burns to skin or eyes, respiratory irritation, blood disorders, nasal septum perforation, spleen disorders

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media	Not flammable: Use extinguishing media for surrounding fire
Explosion Hazard	Not applicable
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, copper oxides, hydrogen chloride gas, Iron oxides
Protective Equipment	Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely, Keep unprotected personnel from entering the hazard area, Ventilate area
Personal Precautions	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
Protective Equipment	Safety Glasses, Gloves, Chemical Apron, Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment
Clean Up Procedures	Small Spills: Use wet vacuum or mop and wringer to pick up spilled material then mop area with clean water, Large Spills: Absorb spill with inert material, place in a chemical waste container, mop area with clean water
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Do not get in eyes, on skin, or clothing, Avoid breathing mist, vapors or fumes, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly with soap and water after handling, Avoid release to the environment
Storage	Keep container closed when not in use, Store in a cool place away from incompatible materials, Store in corrosive resistant container
Incompatible Materials	Incompatible with, alkalis, alkaline materials, amines, hexalithium disilicide, metal acetylides, permanganates, potassium, sodium, strong oxidizing agents, metals, aluminum

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMITS**

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA (TWA 8)	OSHA (CEIL)	NIOSH (TWA 10)	NIOSH (STEL)	Significant Exposure
Iron(III) Chloride			(as Fe) 1 mg/m ³				
Copper(II) Chloride Dihydrate	(as Cu) 1 mg/m ³		(as Cu) 1 mg/m ³				Dust, Mist
Hydrochloric Acid		2 ppm (CEIL)		5 ppm (7 mg/m ³)		5 ppm (CEIL)	ED,SD,RT

PERSONAL PROTECTION

HMIS HAZARD RATINGS	
Health	3
Flammability	0
Reactivity	0
Personal Protection	H

Eyes	Wear safety glasses or goggles or face shield when handling / using this material
Hands	Wear chemical resistant impervious gloves when handling / using this material
Lungs	Wear a MSHA / NIOSH approved respirator at or above listed TLV's or if irritation is experienced
Body	"If Situation Requires" - Wear chemical resistant impervious protective clothing if exposure is considered to be likely when handling / using this material
Feet	"If Situation Requires" - Wear chemical resistant impervious footwear if exposure is considered to be likely when handling / using this material
Response	Access to a drench shower with eye wash station is a recommended safety precaution for handling / using this type of material
Ventilation	Ventilate to keep vapors of this material below the lowest ppm listed above, If over Threshold Limit Value use a MSHA / NIOSH approved respirator for organic vapor, supplied air or self-contained breathing apparatus

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3°C (200°F) - TAG Closed Cup	Specific Gravity / Density	~ 1.313
Flammable Limits (v)	ND	pH (± 0.3)	< 2.0
Auto-Ignition Temp.	ND	Viscosity (mm²s / cSt)	ND
Physical State	Viscous Liquid	Melting Point	ND
Appearance	Avocado Green	Boiling Point	ND
Odor	Acidic	Vapor Density (air=1)	ND
Odor Threshold	ND	Vapor Pressure (mmHg)	ND
Solubility	< 79%	Evaporation Rate (nBuAc=1)	ND
Volatiles	< 64%	Partition Coefficient	ND
VOC	0%	Molecular Weight (g/mol)	~ 40.63
LVP-VOC	0%	Decomposition Temperature	ND

SECTION – 10 STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients
Chemical Stability	Stable under normal ambient and anticipated conditions of use
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, alkalies, alkaline materials, amines, hexalithium disilicide, metal acetylides, permanganates, potassium, sodium, strong oxidizing agents, metals, aluminum
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, copper oxides, hydrogen chloride gas, Iron oxides

SECTION – 11 TOXICOLOGICAL INFORMATION**ROUTES OF EXPOSURE**

Eyes (Yes), Skin (Yes), Ingestion (Yes), Inhalation (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye damage
Skin	Can cause serious skin damage, dermatitis
Inhalation	Mist, vapor or fumes may cause, respiratory irritation
Ingestion	May be harmful if swallowed

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, corneal injury, partial or complete blindness
Skin	Causes serious skin damage, dermatitis, ulcerations, corrosive burns
Inhalation	Mist, vapor or fumes may cause, respiratory irritation, nasal septum perforation
Ingestion	May be harmful if swallowed, Ingestion may affect, liver, kidneys, spleen, blood, Symptoms may include, digestive tract burns, nausea, vomiting, abdominal pain, liver or kidney irregularities, spleen disorders

Acute Tox Calculate	Oral: 2,607 mg/kg	Dermal: 8,244 mg/kg	Inhaled: > 20 mg/l
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Acute Tox Category	Not applicable (Oral >2,000 mg/kg), Not applicable (Dermal >2,000 mg/kg), Not applicable (Inhaled >5 mg/l) Dust or Mist
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Target Organs	Blood, Kidneys, Liver, Skin, Spleen, Eyes, Respiratory System, Nasal Cavities
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Medical Conditions	Preexisting, eye, skin, liver, kidney, blood, respiratory, spleen, sinus, disorders may be aggravated by exposure to this product
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Notes to Physician	Treat symptoms, No specific recommendations known
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CARCINOGENIC – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>NTP</u>	<u>ACGIH</u>	<u>IARC</u>	<u>GHS Category</u>
None Listed	NA	NA	NA	NA

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>Germ Cell Mutagenicity</u>	<u>Toxic to Reproduction</u>
None Listed	NA	NA

COMPONENTS ACUTE TOXICITY

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Form</u>	<u>Subject</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LD50	Oral	Rat	700 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	5,010 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	781 mg/l		(>20 mg/l)
Iron(III) Chloride	LD50	Oral	Rat	316 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	> 2,000 mg/kg		(>2000 mg/kg)
Copper(II) Chloride Dihydrate	LD50	Oral	Rat	584 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rabbit	1224 mg/kg		4 (>1000, ≤2000 mg/kg)

SECTION – 12 ECOLOGICAL INFORMATION

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Subject</u>	<u>Subject Latin</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LC50	Mosquito Fish	(Gambusia affinis)	282 mg/l	96 Hours	4 (>100 mg/l)
Iron(III) Chloride	LC50	Bluegill	(Lepomis macrochirus)	20.3 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Water flea	(Daphnia magna)	12.9 mg/l	48 Hours	3 (>10, ≤100 mg/l)
Copper(II) Chloride Dihydrate	LC50	Rainbow Trout	(Oncorhynchus mykiss)	0.286 mg/l	96 Hours	1 (≤1 mg/l)
	EC50	Algae	(Pseudokirchneriella s.)	0.05 mg/l	72 Hours	1 (≤1 mg/l)
	NOEC	Water Flea	(Daphnia magna)	0.368 mg/l	21 Days	1 (≤1 mg/l)

Presistence And Degradability	When released into the soil, this material is not expected to biodegrade
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Bioaccumulative Potential	Has low potential for bioaccumulation due to its high solubility in water
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Mobility In Soil	This material is a mobile liquid
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Other Adverse Effects	Toxic to aquatic life with long lasting effects
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SECTION – 13 DISPOSAL CONSIDERATIONS

Disposal Statement	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER Dispose of any waste in accordance with all State and Federal Guidelines and Regulations
Container Disposal	Empty containers retain product residue (vapors, liquid or solid) observe all precautions when handling, Empty drums should be returned to distributor or taken to an approved waste handling site for recycling or disposal
Material Disposal	This material as supplied, when discarded or disposed of, is a hazardous waste according to Federal Regulations (40 CFR 261) due to its composition containing in some or all of its components, Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate

SECTION – 14 TRANSPORT INFORMATION**DOT CLASSIFICATION**

UN Number	Proper Shipping Name n.o.s. (Chemicals) or "Limits"				
UN 3264	CORROSIVE, LIQUID, ACIDIC, INORGANIC, n.o.s.(Hydrochloric Acid, Copper(II) Chloride)				
Hazard Class	Packing Group	Label Codes	Reportable Quantity (lb)	Response	Marine Pollutant
8	II	Corrosive Liquid	(74) = 10 Copper(II) Chloride	154	No
Additional Info:					

SECTION – 15 REGULATORY INFORMATION**TSCA**

CHEMICAL NAME	Sec 8(b) Active Inventory	Sec 8(d) Health And Safety	Sec 4(a) Chemical Test Rules	Sec 12(b) Export Notification
Iron(III) Chloride	Yes			
Hydrochloric Acid	Yes			

REPORTABLE QUANTITIES

CHEMICAL NAME	Extremely Hazardous		Reportable Quantity	Emission Reporting		
	EPCRA TPQ Sec 302	EPCRA RQ Sec 304	CERCLA RQ Sec 103	TRI Sec 313	RCRA Code	RMP TQ Sec 112r
Hydrochloric Acid			5000			
Iron(III) Chloride			1000			
Cupric Chloride			10	Yes		

SARA

SARA	Section 311		Section 311 / 312 Hazards			
CHEMICAL NAME	Hazardous Chemical	Acute	Chronic	Flammable	Pressure	Reactive
Iron(III) Chloride	Yes	Yes				
Hydrochloric Acid	Yes	Yes				

RIGHT TO KNOW

CHEMICAL NAME	STATE											
	CA	CT	FL	IL	LA	NJ	NY	PA	MI	MN	MA	RI
Iron(III) Chloride	Yes					Yes		Yes			Yes	Yes
Hydrochloric Acid	Yes				Yes	Yes	Yes	Yes		Yes	Yes	Yes

CALIFORNIA

WARNING: This Product can expose you to chemicals (Listed below) known to the State of California to cause cancer, birth defects or reproductive harm. For more information go to www.P65Warnings.ca.gov

CHEMICAL NAME	CAS #	Birth Defects	Reproductive Harm	Carcinogen	Developmental
None Listed					

CLEAN AIR WATER ACTS

CHEMICAL NAME	CAS #	Clean Air Acts			Clean Water Acts		
		HAP	Ozone Class 1	Ozone Class 2	HS	PP	TP
Hydrochloric Acid	7647-01-0	Yes					

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Iron(III) Chloride	Yes	Yes	Yes	Yes	Yes	Yes
Hydrochloric Acid	Yes	Yes	Yes	Yes	Yes	Yes

SECTION – 16 OTHER INFORMATION**SDS LEGEND DESCRIPTION**

~	Approximately	KD	Kidney Damage (nephropathy)
ACGIH	American Conference of Governmental Industrial Hygienists	LC50	A concentration that is lethal to 50% of a given species in a given time
CAS	Chemical Abstracts Service Registry	LD50	Dose that is lethal to 50% of a given species by a given route of exposure
CEIL	Ceiling Limit (15 minutes)	LEL	Lower Explosive Limit
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act	LD	Liver Damage
CI	Cochlear Impairment	NA	Not Applicable
CNS	Central Nervous System	ND	Not Determined
EC50	Concentration of a chemical that gives half-maximal response	NE	Not Established
EPA	Environmental Protection Agency	NFPA	National Fire Protection Association
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)	NIOSH	National Institute for Occupational Safety and Health
FBG	Full Bunker Gear	NTP	National Toxicology Program
GHS	Globally Harmonized System	OSHA	Occupational Safety and Health Administration
HAP	California Hazardous Air Pollutant Clean Air Act	PEL	Permissible Exposure Limit (OSHA)
HMIS-A	Safety glasses	PNS	Peripheral Nervous System
HMIS-B	Safety glasses, gloves	PP	California Priority Pollutant under the Clean Water Act
HMIS-C	Safety glasses, gloves, chemical apron	REL	Recommended exposure limit (NIOSH)
HMIS-D	Face shield, gloves, chemical apron	RT	Upper Respiratory Tract
HMIS-E	Safety glasses, gloves, dust respirator	Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator	SARA	Superfund Amendments and Reauthorization Act
HMIS-G	Safety glasses, gloves, vapor respirator	STEL	Short Term Exposure Limit (15 minutes)
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator	TC Lo	Lowest concentration that is toxic to a given species in a given time
HMIS-I	Safety glasses, gloves, dust and vapor respirator	TD Lo	Lowest dose that is toxic to a given species
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator	TLV	Threshold Limit Value (ACGIH)
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots	TP	California Toxic Pollutant under the Clean Water Act
HMIS-X	Ask Supervisor	TSCA	Toxic Substances Control Act
HS	California Hazardous Substance under the Clean Water Act	TWA	Time Weighted Average (8 hours) - NOISH (10 hours)
IG / IH	(IG = Ingested) / (IH = Inhaled - Vapors / Mists / Gas)	UEL	Upper Explosive Limit

Direct Colors LLC

and nCites LLC have compiled the information herein from sources believed to be reliable and up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources or the completeness and expressly do not make warranties, nor assume any liability for its use. The information contained herein is provided for reference purposes only and is intended only for persons having relevant technical skills. Because conditions and manner of use are outside of our control, the user is responsible for determining the conditions of safe use of the product. Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries, losses, or damages to persons or property arising from the use of this product or information.

-- End of Safety Data Sheet --

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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Product Use Concrete Stain & Dye

Company Name Direct Colors LLC **Office** (877) 255-2656 ext.1
430 E 10th St
Shawnee OK 74801 **Web** www.DirectColors.com

EMERGENCY TELEPHONE NUMBER **INFOTRAC** (800) 535-5053

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Signal Word Danger

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Avoid breathing dust / fume / gas / mist / vapours / spray P261
Do not get in eyes, on skin, or on clothing P262
Wash thoroughly after handling P264
Do not eat, drink or smoke when using this product P270
Use only outdoors or in a well-ventilated area P271
Avoid release to the environment P273
Wear protective gloves / protective clothing / eye protection / face protection P280
In case of inadequate ventilation wear respiratory protection P285
Absorb spillage to prevent material damage P390
Collect spillage P391
Store in a well-ventilated place, Store locked up, Keep container tightly closed P403+P405+P233
Store in corrosive resistant container P406
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SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
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SECTION – 4 FIRST AID MEASURES

Eye Contact Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room

Skin Contact Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Be sure to remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention

Inhaled Move person to fresh air, if they have problem breathing, show signs of overexposure or feel unwell obtain medical attention, Only give artificial respiration if breathing has stopped. Do not use mouth-to-mouth method if victim ingested or inhaled the substance, Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device

Ingested DO NOT INDUCE VOMITING, rinse mouth with water, and drink small quantities of water, Call a physician, or poison control center, and get medical attention, If victim feels nauseous stop drinking, If vomiting occurs, keep head below hips to prevent aspiration into the lungs

Important Effects	Exposure can / may affect, blood, digestive system, eyes, kidneys, liver, nasal septum, respiratory, skin, spleen
Important Symptoms	Symptoms may include, liver or kidney irregularities, digestive tract burns, corrosive burns to skin or eyes, respiratory irritation, blood disorders, nasal septum perforation, spleen disorders

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media	Not flammable: Use extinguishing media for surrounding fire
Explosion Hazard	Not applicable
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, copper oxides, hydrogen chloride gas
Protective Equipment	Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely, Keep unprotected personnel from entering the hazard area, Ventilate area
Personal Precautions	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
Protective Equipment	Safety Glasses, Gloves, Chemical Apron, Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment
Clean Up Procedures	Small Spills: Use wet vacuum or mop and wringer to pick up spilled material then mop area with clean water, Large Spills: Absorb spill with inert material, place in a chemical waste container, mop area with clean water
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Do not get in eyes, on skin, or clothing, Avoid breathing mist, vapors or fumes, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly with soap and water after handling, Avoid release to the environment
Storage	Keep container closed when not in use, Store in a cool place away from incompatible materials, Store in corrosive resistant container
Incompatible Materials	Incompatible with, alkalis, amines, bases, hexalithium disilicide, metal acetylides, permanganates, potassium, sodium, strong oxidizing agents, alkaline earth metals, aluminum

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMITS**

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA (TWA 8)	OSHA (CEIL)	NIOSH (TWA 10)	NIOSH (STEL)	Significant Exposure
Copper(II) Chloride Dihydrate	(as Cu) 1 mg/m ³		(as Cu) 1 mg/m ³				Dust, Mist
Hydrochloric Acid		2 ppm (CEIL)		5 ppm (7 mg/m ³)		5 ppm (CEIL)	ED,SD,RT

PERSONAL PROTECTION

HMIS HAZARD RATINGS	
Health	3
Flammability	0
Reactivity	0
Personal Protection	H

Eyes	Wear safety glasses or goggles or face shield when handling / using this material
Hands	Wear chemical resistant impervious gloves when handling / using this material
Lungs	Wear a MSHA / NIOSH approved respirator at or above listed TLV's or if irritation is experienced
Body	"If Situation Requires" - Wear chemical resistant impervious protective clothing if exposure is considered to be likely when handling / using this material
Feet	"If Situation Requires" - Wear chemical resistant impervious footwear if exposure is considered to be likely when handling / using this material
Response	Access to a drench shower with eye wash station is a recommended safety precaution for handling / using this type of material
Ventilation	Ventilate to keep vapors of this material below the lowest ppm listed above, If over Threshold Limit Value use a MSHA / NIOSH approved respirator for organic vapor, supplied air or self-contained breathing apparatus

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3°C (200°F) - TAG Closed Cup	Specific Gravity / Density	~ 1.30
Flammable Limits (v)	ND	pH (± 0.3)	< 2.0
Auto-Ignition Temp.	ND	Viscosity (mm²s / cSt)	ND
Physical State	Viscous Liquid	Melting Point	ND
Appearance	Blue	Boiling Point	ND
Odor	Acidic	Vapor Density (air=1)	ND
Odor Threshold	ND	Vapor Pressure (mmHg)	ND
Solubility	< 78%	Evaporation Rate (nBuAc=1)	ND
Volatiles	< 64%	Partition Coefficient	ND
VOC	0%	Molecular Weight (g/mol)	~ 39.80
LVP-VOC	0%	Decomposition Temperature	ND

SECTION – 10 STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients
Chemical Stability	Stable under normal ambient and anticipated conditions of use
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, alkalis, amines, bases, hexalithium disilicide, metal acetylides, permanganates, potassium, sodium, strong oxidizing agents, alkaline earth metals, aluminum
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, copper oxides, hydrogen chloride gas

SECTION – 11 TOXICOLOGICAL INFORMATION**ROUTES OF EXPOSURE**

Eyes (Yes), Skin (Yes), Ingestion (Yes), Inhalation (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye damage
Skin	Can cause serious skin damage, dermatitis
Inhalation	Mist, vapor or fumes may cause, respiratory irritation
Ingestion	May be harmful if swallowed

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, corneal injury, partial or complete blindness
Skin	Causes serious skin damage, dermatitis, ulcerations, corrosive burns
Inhalation	Mist, vapor or fumes may cause, respiratory irritation, nasal septum perforation
Ingestion	May be harmful if swallowed, Ingestion may affect, liver, kidneys, spleen, blood, Symptoms may include, digestive tract burns, nausea, vomiting, abdominal pain, liver or kidney irregularities, spleen disorders
Acute Tox Calculate	Oral: 2,760 mg/kg Dermal: 8,215 mg/kg Inhaled: > 20 mg/l
Acute Tox Category	Not applicable (Oral >2,000 mg/kg), Not applicable (Dermal >2,000 mg/kg), Not applicable (Inhaled >5 mg/l) Dust or Mist
Target Organs	Blood, Kidneys, Liver, Skin, Spleen, Eyes, Respiratory System, Nasal Cavities
Medical Conditions	Preexisting, eye, skin, liver, kidney, blood, respiratory, spleen, sinus, disorders may be aggravated by exposure to this product
Notes to Physician	Treat symptoms, No specific recommendations known

CARCINOGENIC – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>NTP</u>	<u>ACGIH</u>	<u>IARC</u>	<u>GHS Category</u>
None Listed	NA	NA	NA	NA

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>Germ Cell Mutagenicity</u>	<u>Toxic to Reproduction</u>
None Listed	NA	NA

COMPONENTS ACUTE TOXICITY

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Form</u>	<u>Subject</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LD50	Oral	Rat	700 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	5,010 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	781 mg/l		(>20 mg/l)
Copper(II) Chloride Dihydrate	LD50	Oral	Rat	584 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rabbit	1224 mg/kg		4 (>1000, ≤2000 mg/kg)


SECTION – 12 ECOLOGICAL INFORMATION

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Subject</u>	<u>Subject Latin</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LC50	Mosquito Fish	(Gambusia affinis)	282 mg/l	96 Hours	4 (>100 mg/l)
Copper(II) Chloride Dihydrate	LC50	Rainbow Trout	(Oncorhynchus mykiss)	0.286 mg/l	96 Hours	1 (≤1 mg/l)
	EC50	Algae	(Pseudokirchneriella s.)	0.05 mg/l	72 Hours	1 (≤1 mg/l)
	NOEC	Water Flea	(Daphnia magna)	0.368 mg/l	21 Days	1 (≤1 mg/l)
Presistence And Degradability	When released into the soil, this material is not expected to biodegrade					
Bioaccumulative Potential	Has low potential for bioaccumulation due to its high solubility in water					
Mobility In Soil	This material is a mobile liquid					
Other Adverse Effects	Toxic to aquatic life with long lasting effects					

SECTION – 13 DISPOSAL CONSIDERATIONS

Disposal Statement	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER Dispose of any waste in accordance with all State and Federal Guidelines and Regulations
Container Disposal	Empty containers retain product residue (vapors, liquid or solid) observe all precautions when handling, Empty drums should be returned to distributor or taken to an approved waste handling site for recycling or disposal
Material Disposal	This material as supplied, when discarded or disposed of, is a hazardous waste according to Federal Regulations (40 CFR 261) due to its composition containing in some or all of its components, Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate

SECTION – 14 TRANSPORT INFORMATION**DOT CLASSIFICATION**

UN Number	Proper Shipping Name n.o.s. (Chemicals) or "Limits"				
UN 3264	CORROSIVE, LIQUID, ACIDIC, INORGANIC, n.o.s.(Hydrochloric Acid, Copper(II) Chloride)				
Hazard Class	Packing Group	Label Codes	Reportable Quantity (lb)	Response	Marine Pollutant
8	II	Corrosive Liquid	(67) = 10 Cupric Chloride	154	No
Additional Info:					

SECTION – 15 REGULATORY INFORMATION**TSCA**

CHEMICAL NAME	Sec 8(b) Active Inventory	Sec 8(d) Health And Safety	Sec 4(a) Chemical Test Rules	Sec 12(b) Export Notification
Hydrochloric Acid	Yes			

REPORTABLE QUANTITIES

CHEMICAL NAME	Extremely Hazardous	Reportable Quantity	Emission Reporting
CHEMICAL NAME	EPCRA TPQ Sec 302	EPCRA RQ Sec 304	CERCLA RQ Sec 103
Hydrochloric Acid		5000	
Cupric Chloride		10	Yes

SARA

CHEMICAL NAME	Section 311	Section 311 / 312 Hazards
CHEMICAL NAME	Hazardous Chemical	Acute
Hydrochloric Acid	Yes	Yes

RIGHT TO KNOW

CHEMICAL NAME	CA	CT	FL	IL	LA	NJ	NY	PA	MI	MN	MA	RI	WI
Hydrochloric Acid	Yes				Yes	Yes	Yes	Yes		Yes	Yes	Yes	

CALIFORNIA

WARNING: This Product can expose you to chemicals (Listed below) known to the State of California to cause cancer, birth defects or reproductive harm. For more information go to www.P65Warnings.ca.gov

CHEMICAL NAME	CAS #	Birth Defects	Reproductive Harm	Carcinogen	Developmental
None Listed					

CLEAN AIR WATER ACTS

CHEMICAL NAME	CAS #	Clean Air Acts	Clean Water Acts
CHEMICAL NAME	CAS #	HAP	Ozone Class 1
Hydrochloric Acid	7647-01-0	Yes	

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Hydrochloric Acid	Yes	Yes	Yes	Yes	Yes	Yes

SECTION – 16 OTHER INFORMATION**SDS LEGEND DESCRIPTION**

~	Approximately	KD	Kidney Damage (nephropathy)
ACGIH	American Conference of Governmental Industrial Hygienists	LC50	A concentration that is lethal to 50% of a given species in a given time
CAS	Chemical Abstracts Service Registry	LD50	Dose that is lethal to 50% of a given species by a given route of exposure
CEIL	Ceiling Limit (15 minutes)	LEL	Lower Explosive Limit
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act	LD	Liver Damage
CI	Cochlear Impairment	NA	Not Applicable
CNS	Central Nervous System	ND	Not Determined
EC50	Concentration of a chemical that gives half-maximal response	NE	Not Established
EPA	Environmental Protection Agency	NFPA	National Fire Protection Association
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)	NIOSH	National Institute for Occupational Safety and Health
FBG	Full Bunker Gear	NTP	National Toxicology Program
GHS	Globally Harmonized System	OSHA	Occupational Safety and Health Administration
HAP	California Hazardous Air Pollutant Clean Air Act	PEL	Permissible Exposure Limit (OSHA)
HMIS-A	Safety glasses	PNS	Peripheral Nervous System
HMIS-B	Safety glasses, gloves	PP	California Priority Pollutant under the Clean Water Act
HMIS-C	Safety glasses, gloves, chemical apron	REL	Recommended exposure limit (NIOSH)
HMIS-D	Face shield, gloves, chemical apron	RT	Upper Respiratory Tract
HMIS-E	Safety glasses, gloves, dust respirator	Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator	SARA	Superfund Amendments and Reauthorization Act
HMIS-G	Safety glasses, gloves, vapor respirator	STEL	Short Term Exposure Limit (15 minutes)
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator	TC Lo	Lowest concentration that is toxic to a given species in a given time
HMIS-I	Safety glasses, gloves, dust and vapor respirator	TD Lo	Lowest dose that is toxic to a given species
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator	TLV	Threshold Limit Value (ACGIH)
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots	TP	California Toxic Pollutant under the Clean Water Act
HMIS-X	Ask Supervisor	TSCA	Toxic Substances Control Act
HS	California Hazardous Substance under the Clean Water Act	TWA	Time Weighted Average (8 hours) - NOISH (10 hours)
IG / IH	(IG = Ingested) / (IH = Inhaled - Vapors / Mists / Gas)	UEL	Upper Explosive Limit

Direct Colors LLC

and nCites LLC have compiled the information herein from sources believed to be reliable and up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources or the completeness and expressly do not make warranties, nor assume any liability for its use. The information contained herein is provided for reference purposes only and is intended only for persons having relevant technical skills. Because conditions and manner of use are outside of our control, the user is responsible for determining the conditions of safe use of the product. Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries, losses, or damages to persons or property arising from the use of this product or information.

-- End of Safety Data Sheet --

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name DecoGel™ Concrete Acid Stain (Black) **Item**

Product Use Concrete Stain & Dye

Company Name Direct Colors LLC **Office** (877) 255-2656 ext.1

430 E 10th St

Shawnee

OK 74801

Web www.DirectColors.com

EMERGENCY TELEPHONE NUMBER **INFOTRAC** (800) 535-5053

SECTION – 2 HAZARDS INFORMATION

Pictogram



Signal Word Danger

Hazards **PHYSICAL / HEALTH / ENVIRONMENTAL HAZARD STATEMENTS**

May be corrosive to metals

Harmful if swallowed

Causes severe skin burns and eye damage

May cause an allergic skin reaction

Causes serious eye damage

Harmful if inhaled

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause respiratory irritation

May cause genetic defects

May cause cancer

May damage fertility or the unborn child

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

Causes damage to organs through prolonged or repeated exposure

kidneys, liver, respiratory, skin ulceration

May cause damage to organs through prolonged or repeated exposure

nervous systems, by inhalation of dust / mist, or ingestion

Precautions **HANDLING / PROTECTION / FIRE / STORAGE / DISPOSAL**

Keep out of reach of children

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Keep only in original container

Avoid breathing dust / fume / gas / mist / vapours / spray

Do not get in eyes, on skin, or on clothing

Wash thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Contaminated work clothing should not be allowed out of the workplace

Avoid release to the environment

Wear protective gloves / protective clothing / eye protection / face protection

In case of inadequate ventilation wear respiratory protection

Absorb spillage to prevent material damage

Collect spillage

Store in a well-ventilated place, Store locked up, Keep container tightly closed

Store in corrosive resistant container

Dispose of material in accordance with all State and Federal Guidelines and Regulations

HAZARD CATEGORY CLASSIFICATION **CODE**

Category 1 Corrosive to Metals H290

Category 4 Acute Toxicity (Oral) H302

Category 1B Skin & Eye (Corrosion) H314

Category 1 Sensitization (Skin) H317

Category 1 Eye (Damage / Irritation) H318

Category 4 Acute Toxicity (Inhaled) DM H332

Category 1 Sensitization (Respiratory) H334

Category 3 STOT Single Exposure H335

Category 1 Germ Cell Mutagenicity H340

Category 1 Carcinogenicity H350

Category 1 Toxic To Reproduction H360

Category 2 Acute Toxicity (Aquatic) H401

Category 2 Chronic Toxicity (Aquatic) H411

Category 1 STOT Repeat Exposure H372

Category 2 STOT Repeat Exposure H373

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P406

P501

SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
Hydrochloric Acid	Muriatic Acid	7647-01-0	Water < 70%	1 - 15%
Manganese(II) Chloride	Manganese Dichloride	7773-01-5		1 - 20%
Sodium Dichromate	Sodium Dichromate Dihydrate ; Sodium Bichromate	7789-12-0		1 - 20%

SECTION – 4 FIRST AID MEASURES

Eye Contact	Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room
Skin Contact	Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Be sure to remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention
Inhaled	Move person to fresh air, if they have problem breathing, show signs of overexposure or feel unwell obtain medical attention, If breathing is difficult, oxygen or artificial respiration should be administered by qualified personnel
Ingested	DO NOT INDUCE VOMITING, unless directed to do so by medical personnel, If person is fully conscious, rinse mouth with water, and drink small quantities of water, Call a physician, or poison control center, and get medical attention, If victim feels nauseous stop drinking, If vomiting occurs, keep head below hips to prevent aspiration into the lungs
Important Effects	Exposure can / may affect, eyes, kidneys, liver, nervous systems, respiratory, skin
Important Symptoms	Symptoms may include, allergic skin reactions, central nervous system depression, liver or kidney irregularities, corrosive burns to skin or eyes, allergic asthmatic breathing reactions, neurological disorders

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media	Not flammable: Use extinguishing media for surrounding fire
Explosion Hazard	Not applicable
Hazardous Decomposition	Burning or thermal decomposition can produce, hydrogen chloride gas, magnesium oxides
Protective Equipment	Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely, Keep unprotected personnel from entering the hazard area, Ventilate area
Personal Precautions	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
Protective Equipment	Safety Glasses, Gloves, Chemical Apron, Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment, NOTE: Organic spill kits that contain Floor-Dri, kitty litter, or sand should NOT be used because Hydrogen Fluoride reacts with silica to produce silicon tetrafluoride, a toxic gas
Clean Up Procedures	Neutralize spill with soda ash, lime, sodium bicarbonate, or a spill absorbent specified for Hydrogen Fluoride. With clean shovel, carefully place material into clean appropriate waste disposal unit. Flush spill area with water, NOTE: Neutralized Hydrofluoric Acid can still be Toxic, observe all safety precautions
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Do not get in eyes, on skin, or clothing, Avoid breathing mist, vapors or fumes, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly with soap and water after handling, Avoid release to the environment
Storage	Keep container closed when not in use, Store in a cool place away from incompatible materials, Store in corrosive resistant container
Incompatible Materials	Incompatible with, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong acids, sodium oxides, alkaline earth metals, zinc

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMITS**

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA (TWA 8)	OSHA (CEIL)	NIOSH (TWA 10)	NIOSH (STEL)	Significant Exposure
Manganese(II) Chloride	0.1 mg/m³		5 mg/m³		1 mg/m³	3 mg/m³	CNS
Hydrochloric Acid		2 ppm (CEIL)		5 ppm (7 mg/m³)		5 ppm (CEIL)	ED,SD,RT
Sodium Dichromate	(as Cr) 0.05 mg/m³	(as Cr VI) 0.001 mg/m³	(as Cr) 0.005 mg/m³	(as Cr VI) 0.001 mg/m³	(as Cr) 0.001 mg/m³		

PERSONAL PROTECTION

Eyes	Wear safety glasses or goggles or face shield when handling / using this material
Hands	Wear chemical resistant impervious gloves when handling / using this material
Lungs	Wear a MSHA / NIOSH approved respirator at or above listed TLV's or if irritation is experienced
Body	"If Situation Requires" - Wear chemical resistant impervious protective clothing if exposure is considered to be likely when handling / using this material
Feet	"If Situation Requires" - Wear chemical resistant impervious footwear if exposure is considered to be likely when handling / using this material
Response	Access to a drench shower with eye wash station is a recommended safety precaution for handling / using this type of material
Ventilation	Ventilate to keep vapors of this material below the lowest ppm listed above, If over Threshold Limit Value use a MSHA / NIOSH approved respirator for organic vapor, supplied air or self-contained breathing apparatus

HMIS HAZARD RATINGS

Health	3
Flammability	0
Reactivity	0
Personal Protection	H

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3°C (200°F) - TAG Closed Cup	Specific Gravity / Density	~ 1.389
Flammable Limits (v)	ND	pH (± 0.3)	< 2.0
Auto-Ignition Temp.	ND	Viscosity (mm²s / cSt)	ND
Physical State	Liquid	Melting Point	ND
Appearance	Black	Boiling Point	ND
Odor	Acidic	Vapor Density (air=1)	ND
Odor Threshold	ND	Vapor Pressure (mmHg)	ND
Solubility	< 64%	Evaporation Rate (nBuAc=1)	ND
Volatiles	< 62%	Partition Coefficient	ND
VOC	0%	Molecular Weight (g/mol)	~ 44.50
LVP-VOC	0%	Decomposition Temperature	ND

SECTION – 10 STABILITY AND REACTIVITY

Chemical Stability	Stable under normal ambient and anticipated conditions of use
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong acids, sodium oxides, alkaline earth metals, zinc
Hazardous Decomposition	Burning or thermal decomposition can produce, hydrogen chloride gas, magnesium oxides

SECTION – 11 TOXICOLOGICAL INFORMATION**ROUTES OF EXPOSURE**

Eyes (Yes), Skin (Yes), Ingestion (Yes), Inhalation (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye damage
Skin	May cause allergic skin reaction, Can cause serious skin damage
Inhalation	Harmful if inhaled, Mist, vapor or fumes may cause, respiratory irritation, allergic reactions, breathing difficulties
Ingestion	Harmful if swallowed, May affect target organs

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, corneal injury, partial or complete blindness
Skin	May cause allergic skin reaction, Causes serious skin damage, ulcerations, corrosive burns
Inhalation	Harmful if inhaled, Mist, vapor or fumes may cause, respiratory irritation, neurological effects, allergic reactions, asthmatic symptoms, May affect target organs, respiratory system, nervous system, liver, kidneys
Ingestion	Harmful if swallowed, Ingestion may affect, liver, kidneys, respiratory system, nervous system, Symptoms may include, nausea, vomiting, abdominal pain, liver or kidney irregularities, neurological disorders

Acute Tox Calculate Oral: 570 mg/kg Dermal: 17,857 mg/kg Inhaled: 2.2 mg/l

Acute Tox Category Category 4 (Oral >300, ≤2,000 mg/kg), Not applicable (Dermal >2,000 mg/kg), Category 4 (Inhaled >1.0, ≤5 mg/l) Dust or Mist

Target Organs Kidneys, Liver, Mucous Membranes, Skin, Eyes, Respiratory System, Nervous Systems

Medical Conditions Preexisting, eye, skin, liver, kidney, respiratory, mucous membranes, disorders may be aggravated by exposure to this product

Notes to Physician Treat symptoms, No specific recommendations known

CARCINOGENIC – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>NTP</u>	<u>ACGIH</u>	<u>IARC</u>	<u>GHS Category</u>
Sodium Dichromate	K (Known to be)	A1 (Confirmed for human)	1 (Proven for human)	Category 1B

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>Germ Cell Mutagenicity</u>	<u>Toxic to Reproduction</u>
Sodium Dichromate	Yes	Yes

COMPONENTS ACUTE TOXICITY

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Form</u>	<u>Subject</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LD50	Oral	Rat	700 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	5,010 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	781 mg/l		(>20 mg/l)
Manganese(II) Chloride	LD50	Oral	Rat (F)	236 mg/kg	4 Hour (Dust)	3 (>50, ≤300 mg/kg)
Sodium Dichromate	LD50	Oral	Rat	50 mg/kg		2 (>5, ≤50 mg/kg)
	LC50	Inhaled	Rat	0.124 mg/l		1 (≤0.05 mg/l)
	LD50	Dermal	Rabbit	1000 mg/kg		4 (>1000, ≤2000 mg/kg)

SECTION – 12 ECOLOGICAL INFORMATION

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Subject</u>	<u>Subject Latin</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LC50	Mosquito Fish	(Gambusia affinis)	282 mg/l	96 Hours	4 (>100 mg/l)
Manganese(II) Chloride	EC50	Water Flea	(Daphnia magna)	9.8 mg/l	48 Hours	2 (>1, ≤10 mg/l)
	EC50	Green Algae	(Pseudokirchneriella s.)	3.83 mg/l	72 Hours	2 (>1, ≤10 mg/l)
Sodium Dichromate	LC50	Fathead Minnow	(Pimephales promelas)	33.2 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Green Algae	(Selenastrum capricorn)	0.217 mg/l	96 Hours	1 (≤1 mg/l)
	EC50	Water Flea	(Daphnia magna)	0.112 mg/l	48 Hours	1 (≤1 mg/l)
Presistence And Degradability	When released into the soil, this material is not expected to biodegrade					
Bioaccumulative Potential	Has low potential for bioaccumulation due to its high solubility in water					
Mobility In Soil	This material is a mobile liquid					
Other Adverse Effects	Toxic to aquatic life with long lasting effects					

SECTION – 13 DISPOSAL CONSIDERATIONS

Disposal Statement	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER Dispose of any waste in accordance with all State and Federal Guidelines and Regulations
Container Disposal	Empty containers retain product residue (vapors, liquid or solid) observe all precautions when handling, Empty drums should be returned to distributor or taken to an approved waste handling site for recycling or disposal
Material Disposal	This material as supplied, when discarded or disposed of, is a hazardous waste according to Federal Regulations (40 CFR 261) due to its composition containing in some or all of its components, Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate

SECTION – 14 TRANSPORT INFORMATION**DOT CLASSIFICATION**

<u>UN Number</u>	<u>Proper Shipping Name</u> n.o.s. (Chemicals) or "Limits"					
UN 3264	CORROSIVE, LIQUID, ACIDIC, INORGANIC, n.o.s.(Hydrochloric Acid, Sodium Dichromate)					
<u>Hazard Class</u>	<u>Packing Group</u>	<u>Label Codes</u>	<u>Reportable Quantity (lb)</u>	<u>Response</u>	<u>Marine Pollutant</u>	<u>Hazard Label</u>
8	II	Corrosive Liquid	> (50,000)	154	No	

Additional Info:

**SECTION – 15 REGULATORY INFORMATION****TSCA**

<u>CHEMICAL NAME</u>	<u>Sec 8(b) Active Inventory</u>	<u>Sec 8(d) Health And Safety</u>	<u>Sec 4(a) Chemical Test Rules</u>	<u>Sec 12(b) Export Notification</u>
Manganese(II) Chloride	Yes			
Hydrochloric Acid	Yes			
Sodium Dichromate	Yes			

REPORTABLE QUANTITIES

<u>CHEMICAL NAME</u>	<u>Extremely Hazardous</u>	<u>Reportable Quantity</u>	<u>Emission Reporting</u>
	EPCRA TPQ Sec 302	EPCRA RQ Sec 304	CERCLA RQ Sec 103
Hydrochloric Acid		5000	
Sodium Dichromate			Yes

SARA

SARA	Section 311	Section 311 / 312 Hazards				
CHEMICAL NAME	Hazardous Chemical	Acute	Chronic	Flammable	Pressure	Reactive
Manganese(II) Chloride	Yes	Yes				
Hydrochloric Acid	Yes	Yes				
Sodium Dichromate	Yes	Yes	Yes			Yes

RIGHT TO KNOW

<u>CHEMICAL NAME</u>	<u>STATE</u>											
	<u>CA</u>	<u>CT</u>	<u>FL</u>	<u>IL</u>	<u>LA</u>	<u>NJ</u>	<u>NY</u>	<u>PA</u>	<u>MI</u>	<u>MN</u>	<u>MA</u>	<u>RI</u>
Manganese(II) Chloride								Yes				
Hydrochloric Acid	Yes				Yes	Yes	Yes	Yes		Yes	Yes	Yes
Sodium Dichromate								Yes				

CALIFORNIA

WARNING: This Product can expose you to chemicals (Listed below) known to the State of California to cause cancer, birth defects or reproductive harm. For more information go to www.P65Warnings.ca.gov

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Birth Defects</u>	<u>Reproductive Harm</u>	<u>Carcinogen</u>	<u>Developmental</u>
Chromium Compounds				Yes	

CLEAN AIR WATER ACTS

		Clean Air Acts			Clean Water Acts		
CHEMICAL NAME	CAS #	HAP	Ozone Class 1	Ozone Class 2	HS	PP	TP
Hydrochloric Acid	7647-01-0	Yes					

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Hydrochloric Acid	Yes	Yes	Yes	Yes	Yes	Yes

SECTION – 16 OTHER INFORMATION**SDS LEGEND DESCRIPTION**

~	Approximately	KD	Kidney Damage (nephropathy)
ACGIH	American Conference of Governmental Industrial Hygienists	LC50	A concentration that is lethal to 50% of a given species in a given time
CAS	Chemical Abstracts Service Registry	LD50	Dose that is lethal to 50% of a given species by a given route of exposure
CEIL	Ceiling Limit (15 minutes)	LEL	Lower Explosive Limit
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act	LD	Liver Damage
CI	Cochlear Impairment	NA	Not Applicable
CNS	Central Nervous System	ND	Not Determined
EC50	Concentration of a chemical that gives half-maximal response	NE	Not Established
EPA	Environmental Protection Agency	NFPA	National Fire Protection Association
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)	NIOSH	National Institute for Occupational Safety and Health
FBG	Full Bunker Gear	NTP	National Toxicology Program
GHS	Globally Harmonized System	OSHA	Occupational Safety and Health Administration
HAP	California Hazardous Air Pollutant Clean Air Act	PEL	Permissible Exposure Limit (OSHA)
HMIS-A	Safety glasses	PNS	Peripheral Nervous System
HMIS-B	Safety glasses, gloves	PP	California Priority Pollutant under the Clean Water Act
HMIS-C	Safety glasses, gloves, chemical apron	REL	Recommended exposure limit (NIOSH)
HMIS-D	Face shield, gloves, chemical apron	RT	Upper Respiratory Tract
HMIS-E	Safety glasses, gloves, dust respirator	Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator	SARA	Superfund Amendments and Reauthorization Act
HMIS-G	Safety glasses, gloves, vapor respirator	STEL	Short Term Exposure Limit (15 minutes)
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator	TC Lo	Lowest concentration that is toxic to a given species in a given time
HMIS-I	Safety glasses, gloves, dust and vapor respirator	TD Lo	Lowest dose that is toxic to a given species
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator	TLV	Threshold Limit Value (ACGIH)
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots	TP	California Toxic Pollutant under the Clean Water Act
HMIS-X	Ask Supervisor	TSCA	Toxic Substances Control Act
HS	California Hazardous Substance under the Clean Water Act	TWA	Time Weighted Average (8 hours) - NOISH (10 hours)
IG / IH	(IG = Ingested) / (IH = Inhaled - Vapors / Mists / Gas)	UEL	Upper Explosive Limit

Direct Colors LLC

and nCites LLC have compiled the information herein from sources believed to be reliable and up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources or the completeness and expressly do not make warranties, nor assume any liability for its use. The information contained herein is provided for reference purposes only and is intended only for persons having relevant technical skills. Because conditions and manner of use are outside of our control, the user is responsible for determining the conditions of safe use of the product. Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries, losses, or damages to persons or property arising from the use of this product or information.

-- End of Safety Data Sheet --

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name DecoGel™ Concrete Acid Stain (Coffee Brown) **Item**

Product Use Concrete Stain & Dye

Company Name Direct Colors LLC **Office** (877) 255-2656 ext.1
430 E 10th St
Shawnee OK 74801 **Web** www.DirectColors.com

EMERGENCY TELEPHONE NUMBER **INFOTRAC** (800) 535-5053

SECTION – 2 HAZARDS INFORMATION

Pictogram



Signal Word Danger

Hazards **PHYSICAL / HEALTH / ENVIRONMENTAL HAZARD STATEMENTS**

May be corrosive to metals
Harmful if swallowed
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Causes serious eye damage
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause respiratory irritation
May cause genetic defects
May cause cancer
May damage fertility or the unborn child
Toxic to aquatic life
Toxic to aquatic life with long lasting effects
Causes damage to organs through prolonged or repeated exposure
kidneys, liver
May cause damage to organs through prolonged or repeated exposure
nervous systems, by inhalation of dust / mist, or ingestion

HAZARD CATEGORY CLASSIFICATION **CODE**

Category 1 Corrosive to Metals H290
Category 4 Acute Toxicity (Oral) H302
Category 1B Skin & Eye (Corrosion) H314
Category 1 Sensitization (Skin) H317
Category 1 Eye (Damage / Irritation) H318
Category 1 Sensitization (Respiratory) H334
Category 3 STOT Single Exposure H335
Category 1B Germ Cell Mutagenicity H340
Category 1B Carcinogenicity H350
Category 1B Toxic To Reproduction H360
Category 2 Acute Toxicity (Aquatic) H401
Category 2 Chronic Toxicity (Aquatic) H411
Category 1 STOT Repeat Exposure H372
Category 2 STOT Repeat Exposure H373

Precautions **HANDLING / PROTECTION / FIRE / STORAGE / DISPOSAL**

Keep out of reach of children
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep only in original container
Avoid breathing dust / fume / gas / mist / vapours / spray
Do not get in eyes, on skin, or on clothing
Wash thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Avoid release to the environment
Wear protective gloves / protective clothing / eye protection / face protection
In case of inadequate ventilation wear respiratory protection
Absorb spillage to prevent material damage
Collect spillage
Store in a well-ventilated place, Store locked up, Keep container tightly closed
Store in corrosive resistant container
Dispose of material in accordance with all State and Federal Guidelines and Regulations

CODE

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P201
P202
P234
P261
P262
P264
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P273
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P403+P405+P233
P406
P501

SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
Hydrochloric Acid	Muriatic Acid	7647-01-0	Water < 70%	1 - 15%
Iron(III) Chloride	Ferric Chloride Anhydrous	7705-08-0		1 - 20%
Manganese(II) Chloride	Manganese Dichloride	7773-01-5		1 - 20%
Sodium Dichromate	Sodium Dichromate Dihydrate ; Sodium Bichromate	7789-12-0		1 - 20%

SECTION – 4 FIRST AID MEASURES

Eye Contact	Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room
Skin Contact	Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Be sure to remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention
Inhaled	Not applicable under normal use. If irritation is experienced, move person to fresh air
Ingested	DO NOT INDUCE VOMITING, unless directed to do so by medical personnel, If person is fully conscious, rinse mouth with water, and drink small quantities of water, Call a physician, or poison control center, and get medical attention, If victim feels nauseous stop drinking, If vomiting occurs, keep head below hips to prevent aspiration into the lungs
Important Effects	Exposure can / may affect, eyes, kidneys, liver, nervous systems, respiratory, skin
Important Symptoms	Symptoms may include, allergic skin reactions, liver or kidney irregularities, corrosive burns to skin or eyes, allergic asthmatic breathing reactions, neurological disorders

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media	Not flammable: Use extinguishing media for surrounding fire
Explosion Hazard	Not applicable
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, hydrogen chloride gas, Iron oxides, magnesium oxides
Protective Equipment	Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely, Keep unprotected personnel from entering the hazard area, Ventilate area
Personal Precautions	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
Protective Equipment	Safety Glasses, Gloves, Chemical Apron, Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment
Clean Up Procedures	Small Spills: Use wet vacuum or mop and wringer to pick up spilled material then mop area with clean water, Large Spills: Absorb spill with inert material, place in a chemical waste container, mop area with clean water
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Do not get in eyes, on skin, or clothing, Avoid breathing mist, vapors or fumes, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly with soap and water after handling, Avoid release to the environment
Storage	Keep container closed when not in use, Store in a cool place away from incompatible materials, Store in corrosive resistant container
Incompatible Materials	Incompatible with, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong acids, strong oxidizers, sodium oxides, alkaline earth metals, zinc

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMITS**

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA (TWA 8)	OSHA (CEIL)	NIOSH (TWA 10)	NIOSH (STEL)	Significant Exposure
Hydrochloric Acid		2 ppm (CEIL)		5 ppm (7 mg/m ³)		5 ppm (CEIL)	ED,SD,RT
Manganese(II) Chloride	0.1 mg/m ³		5 mg/m ³		1 mg/m ³	3 mg/m ³	CNS
Iron(III) Chloride			(as Fe) 1 mg/m ³				
Sodium Dichromate	(as Cr) 0.05 mg/m ³	(as Cr VI) 0.001 mg/m ³	(as Cr) 0.005 mg/m ³	(as Cr VI) 0.001 mg/m ³	(as Cr) 0.001 mg/m ³		

PERSONAL PROTECTION

Eyes	Wear safety glasses or goggles or face shield when handling / using this material
Hands	Wear chemical resistant impervious gloves when handling / using this material
Lungs	Wear a MSHA / NIOSH approved respirator at or above listed TLV's or if irritation is experienced
Body	"If Situation Requires" - Wear chemical resistant impervious protective clothing if exposure is considered to be likely when handling / using this material
Feet	"If Situation Requires" - Wear chemical resistant impervious footwear if exposure is considered to be likely when handling / using this material
Response	Access to a drench shower with eye wash station is a recommended safety precaution for handling / using this type of material
Ventilation	Ventilate to keep vapors of this material below the lowest ppm listed above, If over Threshold Limit Value use a MSHA / NIOSH approved respirator for organic vapor, supplied air or self-contained breathing apparatus

HMIS HAZARD RATINGS

Health	3
Flammability	0
Reactivity	0
Personal Protection	H

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3°C (200°F) - TAG Closed Cup	Specific Gravity / Density	~ 1.342
Flammable Limits (v)	ND	pH (± 0.3)	< 2.0
Auto-Ignition Temp.	ND	Viscosity (mm²s / cSt)	ND
Physical State	Viscous Liquid	Melting Point	ND
Appearance	Brown	Boiling Point	ND
Odor	Acidic	Vapor Density (air=1)	ND
Odor Threshold	ND	Vapor Pressure (mmHg)	ND
Solubility	< 73%	Evaporation Rate (nBuAc=1)	ND
Volatiles	< 65%	Partition Coefficient	ND
VOC	0%	Molecular Weight (g/mol)	~ 37.63
LVP-VOC	0%	Decomposition Temperature	ND

SECTION – 10 STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients
Chemical Stability	Stable under normal ambient and anticipated conditions of use
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong acids, strong oxidizers, sodium oxides, alkaline earth metals, zinc
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, hydrogen chloride gas, Iron oxides, magnesium oxides

SECTION – 11 TOXICOLOGICAL INFORMATION**ROUTES OF EXPOSURE**

Eyes (Yes), Skin (Yes), Ingestion (Yes), Inhalation (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye damage
Skin	May cause allergic skin reaction, Can cause serious skin damage
Inhalation	May be harmful if inhaled, Mist, vapor or fumes may cause, respiratory irritation, allergic reactions, breathing difficulties
Ingestion	Harmful if swallowed, May affect target organs

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, corneal injury, partial or complete blindness
Skin	May cause allergic skin reaction, Causes serious skin damage, ulcerations, corrosive burns
Inhalation	May be harmful if inhaled, Mist, vapor or fumes may cause, respiratory irritation, neurological effects, allergic reactions, asthmatic symptoms
Ingestion	Harmful if swallowed, Ingestion may affect, liver, kidneys, respiratory system, nervous system, Symptoms may include, nausea, vomiting, abdominal pain, liver or kidney irregularities, neurological disorders

Acute Tox Calculate	Oral:	1,041 mg/kg	Dermal:	21,277 mg/kg	Inhaled:	6.9 mg/l
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Acute Tox Category	Category 4 (Oral >300, ≤2,000 mg/kg), Not applicable (Dermal >2,000 mg/kg), Not applicable (Inhaled >5 mg/l) Dust or Mist
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Target Organs	Kidneys, Liver, Mucous Membranes, Skin, Eyes, Respiratory System, Nervous Systems
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Medical Conditions	Preexisting, eye, skin, liver, kidney, respiratory, mucous membranes, nervous systems, disorders may be aggravated by exposure to this product
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Notes to Physician	Treat symptoms, No specific recommendations known
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CARCINOGENIC – This product contains concentrations above 0.1% of the following:

CHEMICAL NAME	NTP	ACGIH	IARC	GHS Category
Sodium Dichromate	K (Known to be)	A1 (Confirmed for human)	1 (Proven for human)	Category 1B

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

CHEMICAL NAME	Germ Cell Mutagenicity	Toxic to Reproduction
Sodium Dichromate	Yes	Yes

COMPONENTS ACUTE TOXICITY

CHEMICAL NAME	Type	Form	Subject	Result Value	Exposure Time	GHS Category
Hydrochloric Acid	LD50	Oral	Rat	700 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	5,010 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	781 mg/l		(>20 mg/l)
Iron(III) Chloride	LD50	Oral	Rat	316 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	> 2,000 mg/kg		(>2000 mg/kg)
Manganese(II) Chloride	LD50	Oral	Rat (F)	236 mg/kg	4 Hour (Dust)	3 (>50, ≤300 mg/kg)
Sodium Dichromate	LD50	Oral	Rat	50 mg/kg		2 (>5, ≤50 mg/kg)
	LC50	Inhaled	Rat	0.124 mg/l		1 (≤0.05 mg/l)
	LD50	Dermal	Rabbit	1000 mg/kg		4 (>1000, ≤2000 mg/kg)


SECTION – 12 ECOLOGICAL INFORMATION

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Subject</u>	<u>Subject Latin</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LC50	Mosquito Fish	(Gambusia affinis)	282 mg/l	96 Hours	4 (>100 mg/l)
Iron(III) Chloride	LC50	Bluegill	(Lepomis macrochirus)	20.3 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Water flea	(Daphnia magna)	12.9 mg/l	48 Hours	3 (>10, ≤100 mg/l)
Manganese(II) Chloride	EC50	Water Flea	(Daphnia magna)	9.8 mg/l	48 Hours	2 (>1, ≤10 mg/l)
	EC50	Green Algae	(Pseudokirchneriella s.)	3.83 mg/l	72 Hours	2 (>1, ≤10 mg/l)
Sodium Dichromate	LC50	Fathead Minnow	(Pimephales promelas)	33.2 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Green Algae	(Selenastrum capricorn)	0.217 mg/l	96 Hours	1 (≤1 mg/l)
	EC50	Water Flea	(Daphnia magna)	0.112 mg/l	48 Hours	1 (≤1 mg/l)
Presistence And Degradability	When released into the soil, this material is not expected to biodegrade					
Bioaccumulative Potential	Has low potential for bioaccumulation due to its high solubility in water					
Mobility In Soil	This material is a mobile liquid					
Other Adverse Effects	Toxic to aquatic life with long lasting effects					

SECTION – 13 DISPOSAL CONSIDERATIONS

Disposal Statement	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER Dispose of any waste in accordance with all State and Federal Guidelines and Regulations
Container Disposal	Empty containers retain product residue (vapors, liquid or solid) observe all precautions when handling, Empty drums should be returned to distributor or taken to an approved waste handling site for recycling or disposal
Material Disposal	This material as supplied, when discarded or disposed of, is a hazardous waste according to Federal Regulations (40 CFR 261) due to its composition containing in some or all of its components, Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate

SECTION – 14 TRANSPORT INFORMATION**DOT CLASSIFICATION**

<u>UN Number</u>		<u>Proper Shipping Name</u> n.o.s. (Chemicals) or "Limits"					
UN 3264		CORROSIVE, LIQUID, ACIDIC, INORGANIC, n.o.s.(Hydrochloric Acid, Sodium Dichromate)					
<u>Hazard Class</u>	<u>Packing Group</u>	<u>Label Codes</u>	<u>Reportable Quantity (lb)</u>	<u>Response</u>	<u>Marine Pollutant</u>	<u>Hazard Label</u>	<u>Secondary</u>
8	II	Corrosive Liquid	> (40,000)	154	No		
Additional Info:							

SECTION – 15 REGULATORY INFORMATION**TSCA**

<u>CHEMICAL NAME</u>	<u>Sec 8(b) Active Inventory</u>	<u>Sec 8(d) Health And Safety</u>	<u>Sec 4(a) Chemical Test Rules</u>	<u>Sec 12(b) Export Notification</u>
Hydrochloric Acid	Yes			
Manganese(II) Chloride	Yes			
Iron(III) Chloride	Yes			
Sodium Dichromate	Yes			

REPORTABLE QUANTITIES

CHEMICAL NAME	EPCRA TPQ Sec 302	EPCRA RQ Sec 304	CERCLA RQ Sec 103	TRI Sec 313	RCRA Code	RMP TQ Sec 112r
Hydrochloric Acid			5000			
Iron(III) Chloride			1000			
Sodium Dichromate				Yes		

SARA

CHEMICAL NAME	Hazardous Chemical	Acute	Chronic	Flammable	Pressure	Reactive
Hydrochloric Acid	Yes	Yes				
Manganese(II) Chloride	Yes	Yes				
Iron(III) Chloride	Yes	Yes				
Sodium Dichromate	Yes	Yes	Yes			Yes

RIGHT TO KNOW

<u>CHEMICAL NAME</u>	<u>CA</u>	<u>CT</u>	<u>FL</u>	<u>IL</u>	<u>LA</u>	<u>NJ</u>	<u>NY</u>	<u>PA</u>	<u>MI</u>	<u>MN</u>	<u>MA</u>	<u>RI</u>	<u>WI</u>
Hydrochloric Acid	Yes				Yes	Yes	Yes	Yes		Yes	Yes	Yes	
Manganese(II) Chloride								Yes					
Iron(III) Chloride	Yes					Yes		Yes			Yes	Yes	
Sodium Dichromate								Yes					

CALIFORNIA

WARNING: This Product can expose you to chemicals (Listed below) known to the State of California to cause cancer, birth defects or reproductive harm. For more information go to www.P65Warnings.ca.gov

CHEMICAL NAME	CAS #	Birth Defects	Reproductive Harm	Carcinogen	Developmental
Chromium Compounds				Yes	

CLEAN AIR WATER ACTS

CHEMICAL NAME	CAS #	Clean Air Acts HAP	Ozone Class 1	Ozone Class 2	Clean Water Acts HS	PP	TP
Hydrochloric Acid	7647-01-0	Yes					

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Hydrochloric Acid	Yes	Yes	Yes	Yes	Yes	Yes
Iron(III) Chloride	Yes	Yes	Yes	Yes	Yes	Yes

SECTION – 16 OTHER INFORMATION**SDS LEGEND DESCRIPTION**

~	Approximately
ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service Registry
CEIL	Ceiling Limit (15 minutes)
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act
CI	Cochlear Impairment
CNS	Central Nervous System
EC50	Concentration of a chemical that gives half-maximal response
EPA	Environmental Protection Agency
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)
FBG	Full Bunker Gear
GHS	Globally Harmonized System
HAP	California Hazardous Air Pollutant Clean Air Act
HMIS-A	Safety glasses
HMIS-B	Safety glasses, gloves
HMIS-C	Safety glasses, gloves, chemical apron
HMIS-D	Face shield, gloves, chemical apron
HMIS-E	Safety glasses, gloves, dust respirator
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator
HMIS-G	Safety glasses, gloves, vapor respirator
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator
HMIS-I	Safety glasses, gloves, dust and vapor respirator
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots
HMIS-X	Ask Supervisor
HS	California Hazardous Substance under the Clean Water Act
IG / IH	(IG = Ingested) / (IH = Inhaled - Vapors / Mists / Gas)

KD	Kidney Damage (nephropathy)
LC50	A concentration that is lethal to 50% of a given species in a given time
LD50	Dose that is lethal to 50% of a given species by a given route of exposure
LEL	Lower Explosive Limit
LD	Liver Damage
NA	Not Applicable
ND	Not Determined
NE	Not Established
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit (OSHA)
PNS	Peripheral Nervous System
PP	California Priority Pollutant under the Clean Water Act
REL	Recommended exposure limit (NIOSH)
RT	Upper Respiratory Tract
Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
SARA	Superfund Amendments and Reauthorization Act
STEL	Short Term Exposure Limit (15 minutes)
TC Lo	Lowest concentration that is toxic to a given species in a given time
TD Lo	Lowest dose that is toxic to a given species
TLV	Threshold Limit Value (ACGIH)
TP	California Toxic Pollutant under the Clean Water Act
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average (8 hours) - NOISH (10 hours)
UEL	Upper Explosive Limit

Direct Colors LLC

and nCites LLC have compiled the information herein from sources believed to be reliable and up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources or the completeness and expressly do not make warranties, nor assume any liability for its use. The information contained herein is provided for reference purposes only and is intended only for persons having relevant technical skills. Because conditions and manner of use are outside of our control, the user is responsible for determining the conditions of safe use of the product. Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries, losses, or damages to persons or property arising from the use of this product or information.

-- End of Safety Data Sheet --

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name DecoGel™ Concrete Acid Stain (Cola) **Item**
Concrete Stain & Dye

Product Use

Company Name Direct Colors LLC **Office** (877) 255-2656 ext.1
430 E 10th St
Shawnee OK 74801 **Web** www.DirectColors.com

EMERGENCY TELEPHONE NUMBER **INFOTRAC** (800) 535-5053

SECTION – 2 HAZARDS INFORMATION

Pictogram



Signal Word Danger

Hazards PHYSICAL / HEALTH / ENVIRONMENTAL HAZARD STATEMENTS

May be corrosive to metals
Harmful if swallowed
Causes severe skin burns and eye damage
Causes serious eye damage
May cause respiratory irritation
Toxic to aquatic life
Toxic to aquatic life with long lasting effects
May cause damage to organs through prolonged or repeated exposure
liver, nervous systems, by inhalation of dust / mist, or ingestion

HAZARD CATEGORY CLASSIFICATION CODE

Category 1	Corrosive to Metals	H290
Category 4	Acute Toxicity (Oral)	H302
Category 1B	Skin & Eye (Corrosion)	H314
Category 1	Eye (Damage / Irritation)	H318
Category 3	STOT Single Exposure	H335
Category 2	Acute Toxicity (Aquatic)	H401
Category 2	Chronic Toxicity (Aquatic)	H411
Category 2	STOT Repeat Exposure	H373

Precautions HANDLING / PROTECTION / FIRE / STORAGE / DISPOSAL

Keep out of reach of children
Keep only in original container
Avoid breathing dust / fume / gas / mist / vapours / spray
Do not get in eyes, on skin, or on clothing
Wash thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Avoid release to the environment
Wear protective gloves / protective clothing / eye protection / face protection
In case of inadequate ventilation wear respiratory protection
Absorb spillage to prevent material damage
Collect spillage
Store in a well-ventilated place, Store locked up, Keep container tightly closed
Store in corrosive resistant container
Dispose of material in accordance with all State and Federal Guidelines and Regulations

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P403+P405+P233
P406
P501

SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
Hydrochloric Acid	Muriatic Acid	7647-01-0	Water < 70%	1 - 15%
Iron(II) Chloride	Ferrous Chloride Tetrahydrate	13478-10-9		1 - 10%
Iron(III) Chloride	Ferric Chloride Anhydrous	7705-08-0		1 - 20%
Copper(II) Chloride Dihydrate	Cupric Chloride Dihydrate ; Copper Chloride	10125-13-0		1 - 10%
Manganese(II) Chloride	Manganese Dichloride	7773-01-5		1 - 10%

SECTION – 4 FIRST AID MEASURES

Eye Contact Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room

Skin Contact Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Be sure to remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention

Inhaled	Move person to fresh air, if they have problem breathing, show signs of overexposure or feel unwell obtain medical attention, Only give artificial respiration if breathing has stopped. Do not use mouth-to-mouth method if victim ingested or inhaled the substance, Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device
Ingested	DO NOT INDUCE VOMITING, unless directed to do so by medical personnel, If person is fully conscious, rinse mouth with water, and drink small quantities of water, Call a physician, or poison control center, and get medical attention, If victim feels nauseous stop drinking, If vomiting occurs, keep head below hips to prevent aspiration into the lungs
Important Effects	Exposure can / may affect, blood, digestive system, eyes, kidneys, liver, nasal septum, nervous systems, respiratory, skin, spleen
Important Symptoms	Symptoms may include, liver or kidney irregularities, digestive tract burns, corrosive burns to skin or eyes, respiratory irritation, blood disorders, neurological disorders, nasal septum perforation, spleen disorders

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media	Not flammable: Use extinguishing media for surrounding fire
Explosion Hazard	Not applicable
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, copper oxides, hydrogen chloride gas, Iron oxides, magnesium oxides
Protective Equipment	Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely, Keep unprotected personnel from entering the hazard area, Ventilate area
Personal Precautions	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
Protective Equipment	Safety Glasses, Gloves, Chemical Apron, Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment
Clean Up Procedures	Small Spills: Use wet vacuum or mop and wringer to pick up spilled material then mop area with clean water, Large Spills: Absorb spill with inert material, place in a chemical waste container, mop area with clean water
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Do not get in eyes, on skin, or clothing, Avoid breathing mist, vapors or fumes, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly with soap and water after handling, Avoid release to the environment
Storage	Keep container closed when not in use, Store in a cool place away from incompatible materials, Store in corrosive resistant container
Incompatible Materials	Incompatible with, aldehydes, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong acids, strong oxidizing agents, alkaline earth metals, aluminum, zinc

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMITS**

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA (TWA 8)	OSHA (CEIL)	NIOSH (TWA 10)	NIOSH (STEL)	Significant Exposure
Hydrochloric Acid		2 ppm (CEIL)		5 ppm (7 mg/m ³)		5 ppm (CEIL)	ED,SD,RT
Iron(II) Chloride	(as Fe) 1mg/m ³						
Iron(III) Chloride			(as Fe) 1 mg/m ³				
Copper(II) Chloride Dihydrate	(as Cu) 1 mg/m ³		(as Cu) 1 mg/m ³				Dust, Mist
Manganese(II) Chloride	0.1 mg/m ³		5 mg/m ³		1 mg/m ³	3 mg/m ³	CNS

PERSONAL PROTECTION

Eyes	Wear safety glasses or goggles or face shield when handling / using this material
Hands	Wear chemical resistant impervious gloves when handling / using this material
Lungs	Wear a MSHA / NIOSH approved respirator at or above listed TLV's or if irritation is experienced
Body	"If Situation Requires" - Wear chemical resistant impervious protective clothing if exposure is considered to be likely when handling / using this material
Feet	"If Situation Requires" - Wear chemical resistant impervious footwear if exposure is considered to be likely when handling / using this material
Response	Access to a drench shower with eye wash station is a recommended safety precaution for handling / using this type of material
Ventilation	Ventilate to keep vapors of this material below the lowest ppm listed above, If over Threshold Limit Value use a MSHA / NIOSH approved respirator for organic vapor, supplied air or self-contained breathing apparatus

HMIS HAZARD RATINGS

Health	3
Flammability	0
Reactivity	0
Personal Protection	H

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3°C (200°F) - TAG Closed Cup	Specific Gravity / Density	~ 1.29
Flammable Limits (v)	ND	pH (± 0.3)	< 2.0
Auto-Ignition Temp.	ND	Viscosity (mm²s / cSt)	ND
Physical State	Liquid	Melting Point	ND
Appearance	Brown	Boiling Point	ND
Odor	Acidic	Vapor Density (air=1)	ND
Odor Threshold	ND	Vapor Pressure (mmHg)	ND
Solubility	< 84%	Evaporation Rate (nBuAc=1)	ND
Volatiles	< 68%	Partition Coefficient	ND
VOC	0%	Molecular Weight (g/mol)	~ 41.02
LVP-VOC	0%	Decomposition Temperature	ND

SECTION – 10 STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients
Chemical Stability	Stable under normal ambient and anticipated conditions of use
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, aldehydes, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong acids, strong oxidizing agents, alkaline earth metals, aluminum, zinc
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, copper oxides, hydrogen chloride gas, Iron oxides, magnesium oxides

SECTION – 11 TOXICOLOGICAL INFORMATION**ROUTES OF EXPOSURE**

Eyes (Yes), Skin (Yes), Ingestion (Yes), Inhalation (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye damage
Skin	Can cause serious skin damage, dermatitis
Inhalation	Mist, vapor or fumes may cause, respiratory irritation
Ingestion	Harmful if swallowed, May affect target organs

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, corneal injury, partial or complete blindness
Skin	Causes serious skin damage, dermatitis, ulcerations, corrosive burns
Inhalation	Mist, vapor or fumes may cause, respiratory irritation, nasal septum perforation
Ingestion	Harmful if swallowed, Ingestion may affect, liver, kidneys, spleen, blood, nervous system, Symptoms may include, digestive tract burns, nausea, vomiting, liver or kidney irregularities, neurological disorders, spleen disorders
Acute Tox Calculate	Oral: 1,920 mg/kg Dermal: 22,319 mg/kg Inhaled: mg/l
Acute Tox Category	Not applicable (Oral >2,000 mg/kg), Not applicable (Dermal >2,000 mg/kg), Not applicable (Inhaled >5 mg/l) Dust or Mist
Target Organs	Blood, Kidneys, Liver, Skin, Spleen, Eyes, Respiratory System, Nervous Systems, Nasal Cavities
Medical Conditions	Preexisting, eye, skin, liver, kidney, blood, respiratory, spleen, nervous systems, sinus, disorders may be aggravated by exposure to this product
Notes to Physician	Treat symptoms, No specific recommendations known

CARCINOGENIC – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>NTP</u>	<u>ACGIH</u>	<u>IARC</u>	<u>GHS Category</u>
None Listed	NA	NA	NA	NA

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>Germ Cell Mutagenicity</u>	<u>Toxic to Reproduction</u>
None Listed	NA	NA

COMPONENTS ACUTE TOXICITY

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Form</u>	<u>Subject</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LD50	Oral	Rat	700 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	5,010 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	781 mg/l		(>20 mg/l)
Iron(II) Chloride	LD50	Oral	Rat	500 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
Iron(III) Chloride	LD50	Oral	Rat	316 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	> 2,000 mg/kg		(>2000 mg/kg)
Manganese(II) Chloride	LD50	Oral	Rat (F)	236 mg/kg	4 Hours (Mist)	3 (>50, ≤300 mg/kg)
Copper(II) Chloride Dihydrate	LD50	Oral	Rat	584 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rabbit	1224 mg/kg		4 (>1000, ≤2000 mg/kg)


SECTION – 12 ECOLOGICAL INFORMATION

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Subject</u>	<u>Subject Latin</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LC50	Mosquito Fish	(Gambusia affinis)	282 mg/l	96 Hours	4 (>100 mg/l)
Iron(II) Chloride	LC50	Japanese Ricefish	(Oryzias latipes)	46 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Green Algae	(Pseudokirchneriella s.)	6.9 mg/l	72 Hours	2 (>1, ≤10 mg/l)
	EC50	Water Flea	(Daphnia magna)	19 mg/l	48 Hours	3 (>10, ≤100 mg/l)
Iron(III) Chloride	LC50	Bluegill	(Lepomis macrochirus)	20.3 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Water flea	(Daphnia magna)	12.9 mg/l	48 Hours	3 (>10, ≤100 mg/l)
Manganese(II) Chloride	EC50	Water Flea	(Daphnia magna)	9.8 mg/l	48 Hours	2 (>1, ≤10 mg/l)
	EC50	Green Algae	(Pseudokirchneriella s.)	3.83 mg/l	72 Hours	2 (>1, ≤10 mg/l)
Copper(II) Chloride Dihydrate	LC50	Rainbow Trout	(Oncorhynchus mykiss)	0.286 mg/l	96 Hours	1 (≤1 mg/l)
	EC50	Algae	(Pseudokirchneriella s.)	0.05 mg/l	72 Hours	1 (≤1 mg/l)
	NOEC	Water Flea	(Daphnia magna)	0.368 mg/l	21 Days	1 (≤1 mg/l)
Presistence And Degradability	When released into the soil, this material is not expected to biodegrade					
Bioaccumulative Potential	Has low potential for bioaccumulation due to its high solubility in water					
Mobility In Soil	This material is a mobile liquid					
Other Adverse Effects	Toxic to aquatic life with long lasting effects					

SECTION – 13 DISPOSAL CONSIDERATIONS

Disposal Statement	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER Dispose of any waste in accordance with all State and Federal Guidelines and Regulations
Container Disposal	Empty containers retain product residue (vapors, liquid or solid) observe all precautions when handling, Empty drums should be returned to distributor or taken to an approved waste handling site for recycling or disposal
Material Disposal	This material as supplied, when discarded or disposed of, is a hazardous waste according to Federal Regulations (40 CFR 261) due to its composition containing in some or all of its components, Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate

SECTION – 14 TRANSPORT INFORMATION**DOT CLASSIFICATION**

<u>UN Number</u>		<u>Proper Shipping Name</u> n.o.s. (Chemicals) or "Limits"					
UN 3264		CORROSIVE, LIQUID, ACIDIC, INORGANIC, n.o.s.(Hydrochloric Acid, Copper(II) Chloride)					
<u>Hazard Class</u>	<u>Packing Group</u>	<u>Label Codes</u>	<u>Reportable Quantity (lb)</u>	<u>Response</u>	<u>Marine Pollutant</u>	<u>Hazard Label</u>	<u>Secondary</u>
8	II	Corrosive Liquid	(667) = 10 Cupric Chloride	154	No		
Additional Info: Shipping information for: (Pints, Quarts and Gallons)							

SECTION – 15 REGULATORY INFORMATION**TSCA**

<u>CHEMICAL NAME</u>	<u>Sec 8(b) Active Inventory</u>	<u>Sec 8(d) Health And Safety</u>	<u>Sec 4(a) Chemical Test Rules</u>	<u>Sec 12(b) Export Notification</u>
Hydrochloric Acid	Yes			
Iron(II) Chloride	Yes			
Iron(III) Chloride	Yes			
Manganese(II) Chloride	Yes			

REPORTABLE QUANTITIES

CHEMICAL NAME	EPCRA TPQ Sec 302	EPCRA RQ Sec 304	CERCLA RQ Sec 103	TRI Sec 313	RCRA Code	RMP TQ Sec 112r
Hydrochloric Acid			5000			
Iron(III) Chloride			1000			
Cupric Chloride			10	Yes		

SARA

CHEMICAL NAME	Hazardous Chemical	Acute	Chronic	Flammable	Pressure	Reactive
Hydrochloric Acid	Yes	Yes				
Iron(II) Chloride	Yes	Yes	Yes			
Iron(III) Chloride	Yes	Yes				
Manganese(II) Chloride	Yes	Yes				

RIGHT TO KNOW

CHEMICAL NAME	CA	CT	FL	IL	LA	NJ	NY	PA	MI	MN	MA	RI	WI
Hydrochloric Acid	Yes				Yes	Yes	Yes	Yes		Yes	Yes	Yes	
Iron(III) Chloride	Yes					Yes		Yes			Yes	Yes	
Manganese(II) Chloride								Yes					

CALIFORNIA

WARNING: This Product can expose you to chemicals (Listed below) known to the State of California to cause cancer, birth defects or reproductive harm. For more information go to www.P65Warnings.ca.gov

CHEMICAL NAME	CAS #	Birth Defects	Reproductive Harm	Carcinogen	Developmental
None Listed					

CLEAN AIR WATER ACTS

<u>CLEAN AIR WATER ACTS</u>		Clean Air Acts			Clean Water Acts		
CHEMICAL NAME	CAS #	HAP	Ozone Class 1	Ozone Class 2	HS	PP	TP
Hydrochloric Acid	7647-01-0	Yes					

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Hydrochloric Acid	Yes	Yes	Yes	Yes	Yes	Yes
Iron(II) Chloride	Yes	Yes	Yes	Yes	Yes	Yes
Iron(III) Chloride	Yes	Yes	Yes	Yes	Yes	Yes

SECTION – 16 OTHER INFORMATION**SDS LEGEND DESCRIPTION**

~	Approximately	KD	Kidney Damage (nephropathy)
ACGIH	American Conference of Governmental Industrial Hygienists	LC50	A concentration that is lethal to 50% of a given species in a given time
CAS	Chemical Abstracts Service Registry	LD50	Dose that is lethal to 50% of a given species by a given route of exposure
CEIL	Ceiling Limit (15 minutes)	LEL	Lower Explosive Limit
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act	LD	Liver Damage
CI	Cochlear Impairment	NA	Not Applicable
CNS	Central Nervous System	ND	Not Determined
EC50	Concentration of a chemical that gives half-maximal response	NE	Not Established
EPA	Environmental Protection Agency	NFPA	National Fire Protection Association
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)	NIOSH	National Institute for Occupational Safety and Health
FBG	Full Bunker Gear	NTP	National Toxicology Program
GHS	Globally Harmonized System	OSHA	Occupational Safety and Health Administration
HAP	California Hazardous Air Pollutant Clean Air Act	PEL	Permissible Exposure Limit (OSHA)
HMIS-A	Safety glasses	PNS	Peripheral Nervous System
HMIS-B	Safety glasses, gloves	PP	California Priority Pollutant under the Clean Water Act
HMIS-C	Safety glasses, gloves, chemical apron	REL	Recommended exposure limit (NIOSH)
HMIS-D	Face shield, gloves, chemical apron	RT	Upper Respiratory Tract
HMIS-E	Safety glasses, gloves, dust respirator	Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator	SARA	Superfund Amendments and Reauthorization Act
HMIS-G	Safety glasses, gloves, vapor respirator	STEL	Short Term Exposure Limit (15 minutes)
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator	TC Lo	Lowest concentration that is toxic to a given species in a given time
HMIS-I	Safety glasses, gloves, dust and vapor respirator	TD Lo	Lowest dose that is toxic to a given species
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator	TLV	Threshold Limit Value (ACGIH)
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots	TP	California Toxic Pollutant under the Clean Water Act
HMIS-X	Ask Supervisor	TSCA	Toxic Substances Control Act
HS	California Hazardous Substance under the Clean Water Act	TWA	Time Weighted Average (8 hours) - NOISH (10 hours)
IG / IH	(IG = Ingested) / (IH = Inhaled - Vapors / Mists / Gas)	UEL	Upper Explosive Limit

Direct Colors LLC

and nCites LLC have compiled the information herein from sources believed to be reliable and up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources or the completeness and expressly do not make warranties, nor assume any liability for its use. The information contained herein is provided for reference purposes only and is intended only for persons having relevant technical skills. Because conditions and manner of use are outside of our control, the user is responsible for determining the conditions of safe use of the product. Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries, losses, or damages to persons or property arising from the use of this product or information.

-- End of Safety Data Sheet --

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	DecoGel™ Concrete Acid Stain (Desert Amber)	Item
	Modified Duplicate	
Product Use	Concrete Stain & Dye	
Company Name	Direct Colors LLC	Office (877) 255-2656 ext.1
	430 E 10th St	
	Shawnee OK 74801	Web www.DirectColors.com

EMERGENCY TELEPHONE NUMBER INFOTRAC (800) 535-5053
SECTION – 2 HAZARDS INFORMATION
Pictogram

Signal Word Danger

Hazards **PHYSICAL / HEALTH / ENVIRONMENTAL HAZARD STATEMENTS**

May be corrosive to metals
Harmful if swallowed
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Causes serious eye damage
Harmful if inhaled
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause respiratory irritation
May cause genetic defects
May cause cancer
May damage fertility or the unborn child
Toxic to aquatic life
Toxic to aquatic life with long lasting effects
Causes damage to organs through prolonged or repeated exposure
kidneys, liver

HAZARD CATEGORY CLASSIFICATION **CODE**

Category 1 Corrosive to Metals H290
Category 4 Acute Toxicity (Oral) H302
Category 1B Skin & Eye (Corrosion) H314
Category 1 Sensitization (Skin) H317
Category 1 Eye (Damage / Irritation) H318
Category 4 Acute Toxicity (Inhaled) DM H332
Category 1 Sensitization (Respiratory) H334
Category 3 STOT Single Exposure H335
Category 1 Germ Cell Mutagenicity H340
Category 1 Carcinogenicity H350
Category 1 Toxic To Reproduction H360
Category 2 Acute Toxicity (Aquatic) H401
Category 2 Chronic Toxicity (Aquatic) H411
Category 1 STOT Repeat Exposure H372

Precautions **HANDLING / PROTECTION / FIRE / STORAGE / DISPOSAL**

Keep out of reach of children
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep only in original container
Avoid breathing dust / fume / gas / mist / vapours / spray
Do not get in eyes, on skin, or on clothing
Wash thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Avoid release to the environment
Wear protective gloves / protective clothing / eye protection / face protection
In case of inadequate ventilation wear respiratory protection
Absorb spillage to prevent material damage
Collect spillage
Store in a well-ventilated place, Store locked up, Keep container tightly closed
Store in corrosive resistant container
Dispose of material in accordance with all State and Federal Guidelines and Regulations

CODE

P102
P201
P202
P234
P261
P262
P264
P270
P271
P272
P273
P280
P285
P390
P391
P403+P405+P233
P406
P501

SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
Hydrochloric Acid	Muriatic Acid	7647-01-0	Water < 70%	1 - 15%
Iron(III) Chloride	Ferric Chloride Anhydrous	7705-08-0		1 - 20%
Sodium Dichromate	Sodium Dichromate Dihydrate ; Sodium Bichromate	7789-12-0		1 - 20%

SECTION – 4 FIRST AID MEASURES

Eye Contact	Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room
Skin Contact	Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Be sure to remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention
Inhaled	Move person to fresh air, if they have problem breathing, show signs of overexposure or feel unwell obtain medical attention, If breathing is difficult, oxygen or artificial respiration should be administered by qualified personnel
Ingested	DO NOT INDUCE VOMITING, unless directed to do so by medical personnel, If person is fully conscious, rinse mouth with water, and drink small quantities of water, Call a physician, or poison control center, and get medical attention, If victim feels nauseous stop drinking, If vomiting occurs, keep head below hips to prevent aspiration into the lungs
Important Effects	Exposure can / may affect, eyes, kidneys, liver, respiratory system, skin
Important Symptoms	Symptoms may include, allergic skin reactions, liver or kidney irregularities, corrosive burns to skin or eyes, allergic asthmatic breathing reactions

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media	Not flammable: Use extinguishing media for surrounding fire
Explosion Hazard	Not applicable
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, hydrogen chloride gas, Iron oxides
Protective Equipment	Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely, Keep unprotected personnel from entering the hazard area, Ventilate area
Personal Precautions	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
Protective Equipment	Safety Glasses, Gloves, Chemical Apron, Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment, NOTE: Organic spill kits that contain Floor-Dri, kitty litter, or sand should NOT be used because Hydrogen Fluoride reacts with silica to produce silicon tetrafluoride, a toxic gas
Clean Up Procedures	Neutralize spill with soda ash, lime, sodium bicarbonate, or a spill absorbent specified for Hydrogen Fluoride. With clean shovel, carefully place material into clean appropriate waste disposal unit. Flush spill area with water, NOTE: Neutralized Hydrofluoric Acid can still be Toxic, observe all safety precautions
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Do not get in eyes, on skin, or clothing, Avoid breathing mist, vapors or fumes, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly with soap and water after handling, Avoid release to the environment
Storage	Keep container closed when not in use, Store in a cool place away from incompatible materials, Store in corrosive resistant container
Incompatible Materials	Incompatible with, amines, bases, hexalithium disilicide, metal acetylides, permanganates, strong oxidizing agents, alkaline earth metals

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMITS**

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA (TWA 8)	OSHA (CEIL)	NIOSH (TWA 10)	NIOSH (STEL)	Significant Exposure
Hydrochloric Acid		2 ppm (CEIL)		5 ppm (7 mg/m³)		5 ppm (CEIL)	ED,SD,RT
Iron(III) Chloride			(as Fe) 1 mg/m³				
Sodium Dichromate	(as Cr) 0.05 mg/m³	(as Cr VI) 0.001 mg/m³	(as Cr) 0.005 mg/m³	(as Cr VI) 0.001 mg/m³	(as Cr) 0.001 mg/m³		

PERSONAL PROTECTION

Eyes	Wear safety glasses or goggles or face shield when handling / using this material
Hands	Wear chemical resistant impervious gloves when handling / using this material
Lungs	Wear a MSHA / NIOSH approved respirator at or above listed TLV's or if irritation is experienced
Body	"If Situation Requires" - Wear chemical resistant impervious protective clothing if exposure is considered to be likely when handling / using this material
Feet	"If Situation Requires" - Wear chemical resistant impervious footwear if exposure is considered to be likely when handling / using this material
Response	Access to a drench shower with eye wash station is a recommended safety precaution for handling / using this type of material
Ventilation	Ventilate to keep vapors of this material below the lowest ppm listed above, If over Threshold Limit Value use a MSHA / NIOSH approved respirator for organic vapor, supplied air or self-contained breathing apparatus

HMIS HAZARD RATINGS

Health	3
Flammability	0
Reactivity	0
Personal Protection	H

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3°C (200°F) - TAG Closed Cup	Specific Gravity / Density	~ 1.179
Flammable Limits (v)	ND	pH (± 0.3)	< 2.0
Auto-Ignition Temp.	ND	Viscosity (mm²s / cSt)	ND
Physical State	Viscous Liquid	Melting Point	ND
Appearance	Amber	Boiling Point	ND
Odor	Acidic	Vapor Density (air=1)	ND
Odor Threshold	ND	Vapor Pressure (mmHg)	ND
Solubility	< 75%	Evaporation Rate (nBuAc=1)	ND
Volatiles	< 71%	Partition Coefficient	ND
VOC	0%	Molecular Weight (g/mol)	~ 33.46
LVP-VOC	0%	Decomposition Temperature	ND

SECTION – 10 STABILITY AND REACTIVITY

Chemical Stability	Stable under normal ambient and anticipated conditions of use
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, amines, bases, hexalithium disilicide, metal acetylides, permanganates, strong oxidizing agents, alkaline earth metals
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, hydrogen chloride gas, Iron oxides

SECTION – 11 TOXICOLOGICAL INFORMATION**ROUTES OF EXPOSURE**

Eyes (Yes), Skin (Yes), Ingestion (Yes), Inhalation (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye damage
Skin	May cause allergic skin reaction, Can cause serious skin damage
Inhalation	Harmful if inhaled, Mist, vapor or fumes may cause, respiratory irritation, allergic reactions, breathing difficulties
Ingestion	Harmful if swallowed, May affect target organs

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, corneal injury, partial or complete blindness
Skin	May cause allergic skin reaction, Causes serious skin damage, ulcerations, corrosive burns
Inhalation	Harmful if inhaled, Mist, vapor or fumes may cause, respiratory irritation, allergic reactions, asthmatic symptoms, May affect target organs, respiratory system, liver, kidneys
Ingestion	Harmful if swallowed, Ingestion may affect, liver, kidneys, respiratory system, Symptoms may include, nausea, vomiting, abdominal pain, liver or kidney irregularities

Acute Tox Calculate	Oral:	754 mg/kg	Dermal:	15,267 mg/kg	Inhaled:	2.1 mg/l
Acute Tox Category	Category 4 (Oral >300, ≤2,000 mg/kg), Not applicable (Dermal >2,000 mg/kg), Category 4 (Inhaled >1.0, ≤5 mg/l) Dust or Mist					
Target Organs	Kidneys, Liver, Mucous Membranes, Skin, Eyes, Respiratory System					
Medical Conditions	Preexisting, skin, liver, kidney, respiratory, mucous membranes, disorders may be aggravated by exposure to this product					
Notes to Physician	Treat symptoms, No specific recommendations known					

CARCINOGENIC – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>NTP</u>	<u>ACGIH</u>	<u>IARC</u>	<u>GHS Category</u>
Sodium Dichromate	K (Known to be)	A1 (Confirmed for human)	1 (Proven for human)	Category 1B

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>Germ Cell Mutagenicity</u>	<u>Toxic to Reproduction</u>
Sodium Dichromate	Yes	Yes

COMPONENTS ACUTE TOXICITY

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Form</u>	<u>Subject</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LD50	Oral	Rat	700 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	5,010 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	781 mg/l		(>20 mg/l)
Iron(III) Chloride	LD50	Oral	Rat	316 mg/kg	4 Hour (Dust)	4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	> 2,000 mg/kg		(>2000 mg/kg)
Sodium Dichromate	LD50	Oral	Rat	50 mg/kg	4 Hour (Dust)	2 (>5, ≤50 mg/kg)
	LC50	Inhaled	Rat	0.124 mg/l		1 (≤0.05 mg/l)
	LD50	Dermal	Rabbit	1000 mg/kg		4 (>1000, ≤2000 mg/kg)

SECTION – 12 ECOLOGICAL INFORMATION

CHEMICAL NAME	Type	Subject	Subject Latin	Result Value	Exposure Time	GHS Category
Hydrochloric Acid	LC50	Mosquito Fish	(Gambusia affinis)	282 mg/l	96 Hours	4 (>100 mg/l)
Iron(III) Chloride	LC50	Bluegill	(Lepomis macrochirus)	20.3 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Water flea	(Daphnia magna)	12.9 mg/l	48 Hours	3 (>10, ≤100 mg/l)
Sodium Dichromate	LC50	Fathead Minnow	(Pimephales promelas)	33.2 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Green Algae	(Selenastrum capricorn)	0.217 mg/l	96 Hours	1 (≤1 mg/l)
	EC50	Water Flea	(Daphnia magna)	0.112 mg/l	48 Hours	1 (≤1 mg/l)

Presistence And Degradability When released into the soil, this material is not expected to biodegrade

Bioaccumulative Potential Has low potential for bioaccumulation due to its high solubility in water


Mobility In Soil This material is a mobile liquid

Other Adverse Effects Toxic to aquatic life with long lasting effects

SECTION – 13 DISPOSAL CONSIDERATIONS

Disposal Statement	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER Dispose of any waste in accordance with all State and Federal Guidelines and Regulations
Container Disposal	Empty containers retain product residue (vapors, liquid or solid) observe all precautions when handling, Empty drums should be returned to distributor or taken to an approved waste handling site for recycling or disposal
Material Disposal	This material as supplied, when discarded or disposed of, is a hazardous waste according to Federal Regulations (40 CFR 261) due to its composition containing in some or all of its components, Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate

SECTION – 14 TRANSPORT INFORMATION**DOT CLASSIFICATION**

UN Number		Proper Shipping Name n.o.s. (Chemicals) or "Limits"					
UN 3264		CORROSIVE, LIQUID, ACIDIC, INORGANIC, n.o.s.(Hydrochloric Acid, Sodium Dichromate)					
Hazard Class	Packing Group	Label Codes	Reportable Quantity (lb)	Response	Marine Pollutant	Hazard Label	Secondary
8	II	Corrosive Liquid	> (40,000)	154	No		

Additional Info:

SECTION – 15 REGULATORY INFORMATION**TSCA**

CHEMICAL NAME	Sec 8(b) Active Inventory	Sec 8(d) Health And Safety	Sec 4(a) Chemical Test Rules	Sec 12(b) Export Notification
Hydrochloric Acid	Yes			
Iron(III) Chloride	Yes			
Sodium Dichromate	Yes			

REPORTABLE QUANTITIES

REPORTABLE QUANTITIES		Extremely Hazardous	Reportable Quantity	Emission Reporting		
CHEMICAL NAME	EPCRA TPQ Sec 302	EPCRA RQ Sec 304	CERCLA RQ Sec 103	TRI Sec 313	RCRA Code	RMP TQ Sec 112r
Hydrochloric Acid			5000			
Iron(III) Chloride			1000			
Sodium Dichromate				Yes		

SARA

SARA	Section 311		Section 311 / 312 Hazards			
CHEMICAL NAME	Hazardous Chemical	Acute	Chronic	Flammable	Pressure	Reactive
Hydrochloric Acid	Yes	Yes				
Iron(III) Chloride	Yes	Yes				
Sodium Dichromate	Yes	Yes	Yes			Yes

RIGHT TO KNOW

CHEMICAL NAME	CA	CT	FL	IL	LA	NJ	NY	PA	MI	MN	MA	RI	WI
Hydrochloric Acid	Yes				Yes	Yes	Yes	Yes		Yes	Yes	Yes	
Iron(III) Chloride	Yes					Yes		Yes			Yes	Yes	
Sodium Dichromate								Yes					

CALIFORNIA

WARNING: This Product can expose you to chemicals (Listed below) known to the State of California to cause cancer, birth defects or reproductive harm. For more information go to www.P65Warnings.ca.gov

CHEMICAL NAME	CAS #	Birth Defects	Reproductive Harm	Carcinogen	Developmental
Chromium Compounds				Yes	

CLEAN AIR WATER ACTS

CHEMICAL NAME	CAS #	Clean Air Acts			Clean Water Acts		
		HAP	Ozone Class 1	Ozone Class 2	HS	PP	TP
Hydrochloric Acid	7647-01-0	Yes					

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Hydrochloric Acid	Yes	Yes	Yes	Yes	Yes	Yes
Iron(III) Chloride	Yes	Yes	Yes	Yes	Yes	Yes

SECTION – 16 OTHER INFORMATION**SDS LEGEND DESCRIPTION**

~	Approximately	KD	Kidney Damage (nephropathy)
ACGIH	American Conference of Governmental Industrial Hygienists	LC50	A concentration that is lethal to 50% of a given species in a given time
CAS	Chemical Abstracts Service Registry	LD50	Dose that is lethal to 50% of a given species by a given route of exposure
CEIL	Ceiling Limit (15 minutes)	LEL	Lower Explosive Limit
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act	LD	Liver Damage
CI	Cochlear Impairment	NA	Not Applicable
CNS	Central Nervous System	ND	Not Determined
EC50	Concentration of a chemical that gives half-maximal response	NE	Not Established
EPA	Environmental Protection Agency	NFPA	National Fire Protection Association
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)	NIOSH	National Institute for Occupational Safety and Health
FBG	Full Bunker Gear	NTP	National Toxicology Program
GHS	Globally Harmonized System	OSHA	Occupational Safety and Health Administration
HAP	California Hazardous Air Pollutant Clean Air Act	PEL	Permissible Exposure Limit (OSHA)
HMIS-A	Safety glasses	PNS	Peripheral Nervous System
HMIS-B	Safety glasses, gloves	PP	California Priority Pollutant under the Clean Water Act
HMIS-C	Safety glasses, gloves, chemical apron	REL	Recommended exposure limit (NIOSH)
HMIS-D	Face shield, gloves, chemical apron	RT	Upper Respiratory Tract
HMIS-E	Safety glasses, gloves, dust respirator	Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator	SARA	Superfund Amendments and Reauthorization Act
HMIS-G	Safety glasses, gloves, vapor respirator	STEL	Short Term Exposure Limit (15 minutes)
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator	TC Lo	Lowest concentration that is toxic to a given species in a given time
HMIS-I	Safety glasses, gloves, dust and vapor respirator	TD Lo	Lowest dose that is toxic to a given species
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator	TLV	Threshold Limit Value (ACGIH)
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots	TP	California Toxic Pollutant under the Clean Water Act
HMIS-X	Ask Supervisor	TSCA	Toxic Substances Control Act
HS	California Hazardous Substance under the Clean Water Act	TWA	Time Weighted Average (8 hours) - NOISH (10 hours)
IG / IH	(IG = Ingested) / (IH = Inhaled - Vapors / Mists / Gas)	UEL	Upper Explosive Limit

Direct Colors LLC

and nCites LLC have compiled the information herein from sources believed to be reliable and up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources or the completeness and expressly do not make warranties, nor assume any liability for its use. The information contained herein is provided for reference purposes only and is intended only for persons having relevant technical skills. Because conditions and manner of use are outside of our control, the user is responsible for determining the conditions of safe use of the product. Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries, losses, or damages to persons or property arising from the use of this product or information.

-- End of Safety Data Sheet --

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name DecoGel™ Concrete Acid Stain (English Red) **Item**

Product Use Concrete Stain & Dye

Company Name Direct Colors LLC **Office** (877) 255-2656 ext.1

430 E 10th St

Shawnee

OK 74801

Web www.DirectColors.com

EMERGENCY TELEPHONE NUMBER **INFOTRAC** (800) 535-5053

SECTION – 2 HAZARDS INFORMATION

Pictogram



Signal Word Danger

Hazards **PHYSICAL / HEALTH / ENVIRONMENTAL HAZARD STATEMENTS**

May be corrosive to metals

Harmful if swallowed

Causes severe skin burns and eye damage

Causes serious eye damage

May cause respiratory irritation

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

May cause damage to organs through prolonged or repeated exposure

nervous systems, by inhalation of dust / mist, or ingestion

HAZARD CATEGORY CLASSIFICATION **CODE**

Category 1 Corrosive to Metals H290

Category 4 Acute Toxicity (Oral) H302

Category 1B Skin & Eye (Corrosion) H314

Category 1 Eye (Damage / Irritation) H318

Category 3 STOT Single Exposure H335

Category 2 Acute Toxicity (Aquatic) H401

Category 2 Chronic Toxicity (Aquatic) H411

Category 2 STOT Repeat Exposure H373

Precautions **HANDLING / PROTECTION / FIRE / STORAGE / DISPOSAL**

CODE

Keep out of reach of children

P102

Keep only in original container

P234

Avoid breathing dust / fume / gas / mist / vapours / spray

P261

Do not get in eyes, on skin, or on clothing

P262

Wash thoroughly after handling

P264

Do not eat, drink or smoke when using this product

P270

Use only outdoors or in a well-ventilated area

P271

Avoid release to the environment

P273

Wear protective gloves / protective clothing / eye protection / face protection

P280

In case of inadequate ventilation wear respiratory protection

P285

Absorb spillage to prevent material damage

P390

Collect spillage

P391

Store in a well-ventilated place, Store locked up, Keep container tightly closed

P403+P405+P233

Store in corrosive resistant container

P406

Dispose of material in accordance with all State and Federal Guidelines and Regulations

P501

SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
Hydrochloric Acid	Muriatic Acid	7647-01-0	Water < 70%	1 - 15%
Iron(II) Chloride	Ferrous Chloride Tetrahydrate	13478-10-9		1 - 10%
Iron(III) Chloride	Ferric Chloride Anhydrous	7705-08-0		1 - 20%
Copper(II) Chloride Dihydrate	Cupric Chloride Dihydrate ; Copper Chloride	10125-13-0		1 - 10%
Manganese(II) Chloride	Manganese Dichloride	7773-01-5		1 - 10%

SECTION – 4 FIRST AID MEASURES

Eye Contact	Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room
Skin Contact	Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Be sure to remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention

Inhaled	Move person to fresh air, if they have problem breathing, show signs of overexposure or feel unwell obtain medical attention, Only give artificial respiration if breathing has stopped. Do not use mouth-to-mouth method if victim ingested or inhaled the substance, Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device
Ingested	DO NOT INDUCE VOMITING, unless directed to do so by medical personnel, If person is fully conscious, rinse mouth with water, and drink small quantities of water, Call a physician, or poison control center, and get medical attention, If victim feels nauseous stop drinking, If vomiting occurs, keep head below hips to prevent aspiration into the lungs
Important Effects	Exposure can / may affect, eyes, liver, nervous systems, respiratory, skin
Important Symptoms	Symptoms may include, liver or kidney irregularities, corrosive burns to skin or eyes, respiratory irritation, neurological disorders

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media	Not flammable: Use extinguishing media for surrounding fire
Explosion Hazard	Not applicable
Protective Equipment	Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely, Keep unprotected personnel from entering the hazard area, Ventilate area
Personal Precautions	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
Protective Equipment	Safety Glasses, Gloves, Chemical Apron, Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment
Clean Up Procedures	Small Spills: Use wet vacuum or mop and wringer to pick up spilled material then mop area with clean water, Large Spills: Absorb spill with inert material, place in a chemical waste container, mop area with clean water
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Do not get in eyes, on skin, or clothing, Avoid breathing mist, vapors or fumes, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly with soap and water after handling, Avoid release to the environment
Storage	Keep container closed when not in use, Store in a cool place away from incompatible materials, Store in corrosive resistant container
Incompatible Materials	Incompatible with, aldehydes, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong acids, strong oxidizing agents, alkaline earth metals, aluminum, zinc

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMITS**

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA (TWA 8)	OSHA (CEIL)	NIOSH (TWA 10)	NIOSH (STEL)	Significant Exposure
Hydrochloric Acid		2 ppm (CEIL)		5 ppm (7 mg/m³)		5 ppm (CEIL)	ED,SD,RT
Iron(II) Chloride	(as Fe) 1mg/m³						
Iron(III) Chloride			(as Fe) 1 mg/m³				
Copper(II) Chloride Dihydrate	(as Cu) 1 mg/m³		(as Cu) 1 mg/m³				Dust, Mist
Manganese(II) Chloride	0.1 mg/m³		5 mg/m³		1 mg/m³	3 mg/m³	CNS

PERSONAL PROTECTION

Eyes	Wear safety glasses or goggles or face shield when handling / using this material
Hands	Wear chemical resistant impervious gloves when handling / using this material
Lungs	Wear a MSHA / NIOSH approved respirator at or above listed TLV's or if irritation is experienced
Body	"If Situation Requires" - Wear chemical resistant impervious protective clothing if exposure is considered to be likely when handling / using this material
Feet	"If Situation Requires" - Wear chemical resistant impervious footwear if exposure is considered to be likely when handling / using this material
Response	Access to a drench shower with eye wash station is a recommended safety precaution for handling / using this type of material
Ventilation	Ventilate to keep vapors of this material below the lowest ppm listed above, If over Threshold Limit Value use a MSHA / NIOSH approved respirator for organic vapor, supplied air or self-contained breathing apparatus

HMIS HAZARD RATINGS

Health	3
Flammability	0
Reactivity	0
Personal Protection	H

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3°C (200°F) - TAG Closed Cup	Specific Gravity / Density	~ 1.288
Flammable Limits (v)	ND	pH (± 0.3)	< 2.0
Auto-Ignition Temp.	ND	Viscosity (mm²s / cSt)	ND
Physical State	Viscous Liquid	Melting Point	ND
Appearance	Red	Boiling Point	ND
Odor	Acidic	Vapor Density (air=1)	ND
Odor Threshold	ND	Vapor Pressure (mmHg)	ND
Solubility	< 78%	Evaporation Rate (nBuAc=1)	ND
Volatiles	< 63%	Partition Coefficient	ND
VOC	0%	Molecular Weight (g/mol)	~ 43.77
LVP-VOC	0%	Decomposition Temperature	ND

SECTION – 10 STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients
Chemical Stability	Stable under normal ambient and anticipated conditions of use
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, aldehydes, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong acids, strong oxidizing agents, alkaline earth metals, aluminum, zinc

SECTION – 11 TOXICOLOGICAL INFORMATION**ROUTES OF EXPOSURE**

Eyes (Yes), Skin (Yes), Ingestion (Yes), Inhalation (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye damage
Skin	Can cause serious skin damage, dermatitis
Inhalation	Mist, vapor or fumes may cause, respiratory irritation
Ingestion	Harmful if swallowed, May affect target organs

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, corneal injury, partial or complete blindness
Skin	Causes serious skin damage, dermatitis, ulcerations, corrosive burns
Inhalation	Mist, vapor or fumes may cause, respiratory irritation
Ingestion	Harmful if swallowed, Ingestion may affect, liver, nervous system, Symptoms may include, nausea, vomiting, abdominal pain, liver or kidney irregularities, neurological disorders

Acute Tox Calculate	Oral:	1,937 mg/kg	Dermal:	30,038 mg/kg	Inhaled:	> 20 mg/l
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Acute Tox Category	Category 4 (Oral >300, ≤2,000 mg/kg), Not applicable (Dermal >2,000 mg/kg), Not applicable (Inhaled >5 mg/l) Dust or Mist
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Target Organs	Liver, Skin, Eyes, Respiratory System, Nervous Systems
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Medical Conditions	Preexisting, eye, skin, liver, respiratory, nervous systems, disorders may be aggravated by exposure to this product
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Notes to Physician	Treat symptoms, No specific recommendations known
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CARCINOGENIC – This product contains concentrations above 0.1% of the following:

CHEMICAL NAME	NTP	ACGIH	IARC	GHS Category
None Listed	NA	NA	NA	NA

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

CHEMICAL NAME	Germ Cell Mutagenicity	Toxic to Reproduction
None Listed	NA	NA

COMPONENTS ACUTE TOXICITY

CHEMICAL NAME	Type	Form	Subject	Result Value	Exposure Time	GHS Category
Hydrochloric Acid	LD50	Oral	Rat	700 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	5,010 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	781 mg/l		(>20 mg/l)
Iron(II) Chloride	LD50	Oral	Rat	500 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Oral	Rat	316 mg/kg		4 (>300, ≤2000 mg/kg)
Iron(III) Chloride	LD50	Dermal	Rat	> 2,000 mg/kg		(>2000 mg/kg)
	LD50	Oral	Rat (F)	236 mg/kg		3 (>50, ≤300 mg/kg)
Manganese(II) Chloride	LD50	Oral	Rat	584 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rabbit	1224 mg/kg		4 (>1000, ≤2000 mg/kg)


SECTION – 12 ECOLOGICAL INFORMATION

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Subject</u>	<u>Subject Latin</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LC50	Mosquito Fish	(Gambusia affinis)	282 mg/l	96 Hours	4 (>100 mg/l)
Iron(II) Chloride	LC50	Japanese Ricefish	(Oryzias latipes)	46 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Green Algae	(Pseudokirchneriella s.)	6.9 mg/l	72 Hours	2 (>1, ≤10 mg/l)
	EC50	Water Flea	(Daphnia magna)	19 mg/l	48 Hours	3 (>10, ≤100 mg/l)
Iron(III) Chloride	LC50	Bluegill	(Lepomis macrochirus)	20.3 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Water flea	(Daphnia magna)	12.9 mg/l	48 Hours	3 (>10, ≤100 mg/l)
Manganese(II) Chloride	EC50	Water Flea	(Daphnia magna)	9.8 mg/l	48 Hours	2 (>1, ≤10 mg/l)
	EC50	Green Algae	(Pseudokirchneriella s.)	3.83 mg/l	72 Hours	2 (>1, ≤10 mg/l)
Copper(II) Chloride Dihydrate	LC50	Rainbow Trout	(Oncorhynchus mykiss)	0.286 mg/l	96 Hours	1 (≤1 mg/l)
	EC50	Algae	(Pseudokirchneriella s.)	0.05 mg/l	72 Hours	1 (≤1 mg/l)
	NOEC	Water Flea	(Daphnia magna)	0.368 mg/l	21 Days	1 (≤1 mg/l)
Presistence And Degradability	When released into the soil, this material is not expected to biodegrade					
Bioaccumulative Potential	Has low potential for bioaccumulation due to its high solubility in water					
Mobility In Soil	This material is a mobile liquid					
Other Adverse Effects	Toxic to aquatic life with long lasting effects					

SECTION – 13 DISPOSAL CONSIDERATIONS

Disposal Statement	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER Dispose of any waste in accordance with all State and Federal Guidelines and Regulations
Container Disposal	Empty containers retain product residue (vapors, liquid or solid) observe all precautions when handling, Empty drums should be returned to distributor or taken to an approved waste handling site for recycling or disposal
Material Disposal	This material as supplied, when discarded or disposed of, is a hazardous waste according to Federal Regulations (40 CFR 261) due to its composition containing in some or all of its components, Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate

SECTION – 14 TRANSPORT INFORMATION**DOT CLASSIFICATION**

<u>UN Number</u>	<u>Proper Shipping Name</u> n.o.s. (Chemicals) or "Limits"					
UN 3264	CORROSIVE, LIQUID, ACIDIC, INORGANIC, n.o.s. (Hydrochloric Acid, Copper(II) Chloride)					
<u>Hazard Class</u>	<u>Packing Group</u>	<u>Label Codes</u>	<u>Reportable Quantity (lb)</u>	<u>Response</u>	<u>Marine Pollutant</u>	<u>Hazard Label</u> <u>Secondary</u>
8	II	Corrosive Liquid	(435) = 10 Cupric Chloride	154	No	
Additional Info:						

SECTION – 15 REGULATORY INFORMATION**TSCA**

<u>CHEMICAL NAME</u>	<u>Sec 8(b) Active Inventory</u>	<u>Sec 8(d) Health And Safety</u>	<u>Sec 4(a) Chemical Test Rules</u>	<u>Sec 12(b) Export Notification</u>
Hydrochloric Acid	Yes			
Iron(II) Chloride	Yes			
Iron(III) Chloride	Yes			
Manganese(II) Chloride	Yes			

REPORTABLE QUANTITIES

<u>CHEMICAL NAME</u>	<u>Extremely Hazardous</u>	<u>Reportable Quantity</u>	<u>Emission Reporting</u>
	<u>EPCRA TPQ Sec 302</u> <u>EPCRA RQ Sec 304</u>	<u>CERCLA RQ Sec 103</u>	<u>TRI Sec 313</u> <u>RCRA Code</u> <u>RMP TQ Sec 112r</u>
Hydrochloric Acid		5000	
Iron(III) Chloride		1000	
Cupric Chloride		10	Yes

SARA

<u>CHEMICAL NAME</u>	<u>Section 311</u>	<u>Section 311 / 312 Hazards</u>				
	<u>Hazardous Chemical</u>	<u>Acute</u>	<u>Chronic</u>	<u>Flammable</u>	<u>Pressure</u>	<u>Reactive</u>
Hydrochloric Acid	Yes	Yes				
Iron(II) Chloride	Yes	Yes	Yes			
Iron(III) Chloride	Yes	Yes				
Manganese(II) Chloride	Yes	Yes				

RIGHT TO KNOW

<u>CHEMICAL NAME</u>	<u>STATE</u>											
	<u>CA</u>	<u>CT</u>	<u>FL</u>	<u>IL</u>	<u>LA</u>	<u>NJ</u>	<u>NY</u>	<u>PA</u>	<u>MI</u>	<u>MN</u>	<u>MA</u>	<u>RI</u> <u>WI</u>
Hydrochloric Acid	Yes				Yes	Yes	Yes	Yes		Yes	Yes	Yes
Iron(III) Chloride	Yes					Yes		Yes			Yes	Yes
Manganese(II) Chloride								Yes				

CALIFORNIA

WARNING: This Product can expose you to chemicals (Listed below) known to the State of California to cause cancer, birth defects or reproductive harm. For more information go to www.P65Warnings.ca.gov

CHEMICAL NAME	CAS #	Birth Defects	Reproductive Harm	Carcinogen	Developmental
None Listed					

CLEAN AIR WATER ACTS

<u>CLEAN AIR WATER ACTS</u>		Clean Air Acts			Clean Water Acts		
CHEMICAL NAME	CAS #	HAP	Ozone Class 1	Ozone Class 2	HS	PP	TP
Hydrochloric Acid	7647-01-0	Yes					

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Hydrochloric Acid	Yes	Yes	Yes	Yes	Yes	Yes
Iron(II) Chloride	Yes	Yes	Yes	Yes	Yes	Yes
Iron(III) Chloride	Yes	Yes	Yes	Yes	Yes	Yes

SECTION – 16 OTHER INFORMATION**SDS LEGEND DESCRIPTION**

~	Approximately	KD	Kidney Damage (nephropathy)
ACGIH	American Conference of Governmental Industrial Hygienists	LC50	A concentration that is lethal to 50% of a given species in a given time
CAS	Chemical Abstracts Service Registry	LD50	Dose that is lethal to 50% of a given species by a given route of exposure
CEIL	Ceiling Limit (15 minutes)	LEL	Lower Explosive Limit
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act	LD	Liver Damage
CI	Cochlear Impairment	NA	Not Applicable
CNS	Central Nervous System	ND	Not Determined
EC50	Concentration of a chemical that gives half-maximal response	NE	Not Established
EPA	Environmental Protection Agency	NFPA	National Fire Protection Association
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)	NIOSH	National Institute for Occupational Safety and Health
FBG	Full Bunker Gear	NTP	National Toxicology Program
GHS	Globally Harmonized System	OSHA	Occupational Safety and Health Administration
HAP	California Hazardous Air Pollutant Clean Air Act	PEL	Permissible Exposure Limit (OSHA)
HMIS-A	Safety glasses	PNS	Peripheral Nervous System
HMIS-B	Safety glasses, gloves	PP	California Priority Pollutant under the Clean Water Act
HMIS-C	Safety glasses, gloves, chemical apron	REL	Recommended exposure limit (NIOSH)
HMIS-D	Face shield, gloves, chemical apron	RT	Upper Respiratory Tract
HMIS-E	Safety glasses, gloves, dust respirator	Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator	SARA	Superfund Amendments and Reauthorization Act
HMIS-G	Safety glasses, gloves, vapor respirator	STEL	Short Term Exposure Limit (15 minutes)
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator	TC Lo	Lowest concentration that is toxic to a given species in a given time
HMIS-I	Safety glasses, gloves, dust and vapor respirator	TD Lo	Lowest dose that is toxic to a given species
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator	TLV	Threshold Limit Value (ACGIH)
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots	TP	California Toxic Pollutant under the Clean Water Act
HMIS-X	Ask Supervisor	TSCA	Toxic Substances Control Act
HS	California Hazardous Substance under the Clean Water Act	TWA	Time Weighted Average (8 hours) - NOISH (10 hours)
IG / IH	(IG = Ingested) / (IH = Inhaled - Vapors / Mists / Gas)	UEL	Upper Explosive Limit

Direct Colors LLC

and nCites LLC have compiled the information herein from sources believed to be reliable and up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources or the completeness and expressly do not make warranties, nor assume any liability for its use. The information contained herein is provided for reference purposes only and is intended only for persons having relevant technical skills. Because conditions and manner of use are outside of our control, the user is responsible for determining the conditions of safe use of the product. Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries, losses, or damages to persons or property arising from the use of this product or information.

-- End of Safety Data Sheet --

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name DecoGel™ Concrete Acid Stain (Malayan Buff) **Item**

Product Use Concrete Stain & Dye

Company Name Direct Colors LLC **Office** (877) 255-2656 ext.1
430 E 10th St
Shawnee OK 74801 **Web** www.DirectColors.com

EMERGENCY TELEPHONE NUMBER **INFOTRAC** (800) 535-5053

SECTION – 2 HAZARDS INFORMATION

Pictogram



Signal Word Danger

Hazards **PHYSICAL / HEALTH / ENVIRONMENTAL HAZARD STATEMENTS**

May be corrosive to metals
Causes severe skin burns and eye damage
Causes serious eye damage
May cause respiratory irritation
May cause long lasting harmful effects to aquatic life
May cause damage to organs through prolonged or repeated exposure
liver

HAZARD CATEGORY CLASSIFICATION **CODE**

Category 1 Corrosive to Metals H290
Category 1B Skin & Eye (Corrosion) H314
Category 1 Eye (Damage / Irritation) H318
Category 3 STOT Single Exposure H335
Category 4 Chronic Toxicity (Aquatic) H413
Category 2 STOT Repeat Exposure H373

Precautions **HANDLING / PROTECTION / FIRE / STORAGE / DISPOSAL**

Keep out of reach of children
Keep only in original container
Avoid breathing dust / fume / gas / mist / vapours / spray
Do not get in eyes, on skin, or on clothing
Wash thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Avoid release to the environment
Wear protective gloves / protective clothing / eye protection / face protection
In case of inadequate ventilation wear respiratory protection
Absorb spillage to prevent material damage
Store in a well-ventilated place, Store locked up, Keep container tightly closed
Store in corrosive resistant container
Dispose of material in accordance with all State and Federal Guidelines and Regulations

CODE

P102
P234
P261
P262
P264
P270
P271
P273
P280
P285
P390
P403+P405+P233
P406
P501

SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
Hydrochloric Acid	Muriatic Acid	7647-01-0	Water < 70%	1 - 15%
Iron(II) Chloride	Ferrous Chloride Tetrahydrate	13478-10-9		1 - 10%
Iron(III) Chloride	Ferric Chloride Anhydrous	7705-08-0		1 - 10%

SECTION – 4 FIRST AID MEASURES

Eye Contact	Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room
Skin Contact	Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Be sure to remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention
Inhaled	Not applicable under normal use. If irritation is experienced, move person to fresh air
Ingested	DO NOT INDUCE VOMITING, rinse mouth with water, and drink small quantities of water, Call a physician, or poison control center, and get medical attention, If victim feels nauseous stop drinking, If vomiting occurs, keep head below hips to prevent aspiration into the lungs
Important Effects	Exposure can / may affect, eyes, liver, skin
Important Symptoms	Symptoms may include, liver or kidney irregularities, corrosive burns to skin or eyes, respiratory irritation

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media	Not flammable: Use extinguishing media for surrounding fire
Explosion Hazard	Not applicable
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, hydrogen chloride gas, Iron oxides
Protective Equipment	Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely, Keep unprotected personnel from entering the hazard area, Ventilate area
Personal Precautions	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
Protective Equipment	Safety Glasses, Gloves, Chemical Apron, Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment
Clean Up Procedures	Small Spills: Use wet vacuum or mop and wringer to pick up spilled material then mop area with clean water, Large Spills: Absorb spill with inert material, place in a chemical waste container, mop area with clean water
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Do not get in eyes, on skin, or clothing, Avoid breathing mist, vapors or fumes, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly with soap and water after handling, Avoid release to the environment
Storage	Keep container closed when not in use, Store in a cool place away from incompatible materials, Store in corrosive resistant container
Incompatible Materials	Incompatible with, amines, bases, hexalithium disilicide, metal acetylides, permanganates, strong acids, strong oxidizing agents, metals, alkaline earth metals

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMITS**

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA (TWA 8)	OSHA (CEIL)	NIOSH (TWA 10)	NIOSH (STEL)	Significant Exposure
Hydrochloric Acid		2 ppm (CEIL)		5 ppm (7 mg/m ³)		5 ppm (CEIL)	ED,SD,RT
Iron(II) Chloride	(as Fe) 1mg/m ³						
Iron(III) Chloride			(as Fe) 1 mg/m ³				

PERSONAL PROTECTION

HMIS HAZARD RATINGS	
Health	3
Flammability	0
Reactivity	0
Personal Protection	H

Eyes	Wear safety glasses or goggles or face shield when handling / using this material
Hands	Wear chemical resistant impervious gloves when handling / using this material
Lungs	Wear a MSHA / NIOSH approved respirator at or above listed TLV's or if irritation is experienced
Body	"If Situation Requires" - Wear chemical resistant impervious protective clothing if exposure is considered to be likely when handling / using this material
Feet	"If Situation Requires" - Wear chemical resistant impervious footwear if exposure is considered to be likely when handling / using this material
Response	Access to a drench shower with eye wash station is a recommended safety precaution for handling / using this type of material
Ventilation	Ventilate to keep vapors of this material below the lowest ppm listed above, If over Threshold Limit Value use a MSHA / NIOSH approved respirator for organic vapor, supplied air or self-contained breathing apparatus

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3°C (200°F) - TAG Closed Cup	Specific Gravity / Density	~ 1.12
Flammable Limits (v)	ND	pH (± 0.3)	< 2.0
Auto-Ignition Temp.	ND	Viscosity (mm²s / cSt)	ND
Physical State	Viscous Liquid	Melting Point	ND
Appearance	Tan	Boiling Point	ND
Odor	Acidic	Vapor Density (air=1)	ND
Odor Threshold	ND	Vapor Pressure (mmHg)	ND
Solubility	< 80%	Evaporation Rate (nBuAc=1)	ND
Volatiles	< 75%	Partition Coefficient	ND
VOC	0%	Molecular Weight (g/mol)	~ 21.59
LVP-VOC	0%	Decomposition Temperature	ND

SECTION – 10 STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients
Chemical Stability	Stable under normal ambient and anticipated conditions of use
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, amines, bases, hexalithium disilicide, metal acetylides, permanganates, strong acids, strong oxidizing agents, metals, alkaline earth metals
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, hydrogen chloride gas, Iron oxides

SECTION – 11 TOXICOLOGICAL INFORMATION**ROUTES OF EXPOSURE**

Eyes (Yes), Skin (Yes), Ingestion (Yes), Inhalation (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye damage
Skin	Can cause serious skin damage, dermatitis
Inhalation	Mist, vapor or fumes may cause, respiratory irritation
Ingestion	May be harmful if swallowed

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, corneal injury, partial or complete blindness
Skin	Causes serious skin damage, dermatitis, ulcerations, corrosive burns
Inhalation	Mist, vapor or fumes may cause, respiratory irritation
Ingestion	May be harmful if swallowed, Ingestion may affect, liver, Symptoms may include, nausea, vomiting, abdominal pain, liver or kidney irregularities

Acute Tox Calculate	Oral: 4,926 mg/kg	Dermal: 100,00 mg/kg	Inhaled: > 20 mg/l
Acute Tox Category	Not applicable (Oral >2,000 mg/kg), Not applicable (Dermal >2,000 mg/kg), Not applicable (Inhaled >5 mg/l) Dust or Mist		
Target Organs	Liver, Skin, Eyes, Respiratory System		
Medical Conditions	Preexisting, eye, skin, liver, respiratory, disorders may be aggravated by exposure to this product		
Notes to Physician	Treat symptoms, No specific recommendations known		

CARCINOGENIC – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>NTP</u>	<u>ACGIH</u>	<u>IARC</u>	<u>GHS Category</u>
None Listed	NA	NA	NA	NA

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>Germ Cell Mutagenicity</u>	<u>Toxic to Reproduction</u>
None Listed	NA	NA

COMPONENTS ACUTE TOXICITY

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Form</u>	<u>Subject</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LD50	Oral	Rat	700 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	5,010 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	781 mg/l		(>20 mg/l)
Iron(II) Chloride	LD50	Oral	Rat	500 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
Iron(III) Chloride	LD50	Oral	Rat	316 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	> 2,000 mg/kg		(>2000 mg/kg)


SECTION – 12 ECOLOGICAL INFORMATION

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Subject</u>	<u>Subject Latin</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LC50	Mosquito Fish	(Gambusia affinis)	282 mg/l	96 Hours	4 (>100 mg/l)
Iron(II) Chloride	LC50	Japanese Ricefish	(Oryzias latipes)	46 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Green Algae	(Pseudokirchneriella s.)	6.9 mg/l	72 Hours	2 (>1, ≤10 mg/l)
	EC50	Water Flea	(Daphnia magna)	19 mg/l	48 Hours	3 (>10, ≤100 mg/l)
	LC50	Bluegill	(Lepomis macrochirus)	20.3 mg/l	96 Hours	3 (>10, ≤100 mg/l)
Iron(III) Chloride	LC50	Bluegill	(Lepomis macrochirus)	20.3 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Water flea	(Daphnia magna)	12.9 mg/l	48 Hours	3 (>10, ≤100 mg/l)
Presistence And Degradability	When released into the soil, this material is not expected to biodegrade					
Bioaccumulative Potential	Has low potential for bioaccumulation due to its high solubility in water					
Mobility In Soil	This material is a mobile liquid					
Other Adverse Effects	Toxic to aquatic life with long lasting effects					

SECTION – 13 DISPOSAL CONSIDERATIONS

Disposal Statement	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER Dispose of any waste in accordance with all State and Federal Guidelines and Regulations
Container Disposal	Empty containers retain product residue (vapors, liquid or solid) observe all precautions when handling, Empty drums should be returned to distributor or taken to an approved waste handling site for recycling or disposal
Material Disposal	This material as supplied, when discarded or disposed of, is a hazardous waste according to Federal Regulations (40 CFR 261) due to its composition containing in some or all of its components, Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate

SECTION – 14 TRANSPORT INFORMATION**DOT CLASSIFICATION**

UN Number	Proper Shipping Name n.o.s. (Chemicals) or "Limits"				
UN 3264	CORROSIVE, LIQUID, ACIDIC, INORGANIC, n.o.s.(Hydrochloric Acid, Iron(III) Chloride)				
Hazard Class	Packing Group	Label Codes	Reportable Quantity (lb)	Response	Marine Pollutant
8	II	Corrosive Liquid	> (40,000)	154	No
Additional Info:					

SECTION – 15 REGULATORY INFORMATION**TSCA**

CHEMICAL NAME	Sec 8(b) Active Inventory	Sec 8(d) Health And Safety	Sec 4(a) Chemical Test Rules	Sec 12(b) Export Notification
Hydrochloric Acid	Yes			
Iron(II) Chloride	Yes			
Iron(III) Chloride	Yes			

REPORTABLE QUANTITIES

CHEMICAL NAME	Extremely Hazardous	Reportable Quantity	Emission Reporting
	EPCRA TPQ Sec 302	EPCRA RQ Sec 304	CERCLA RQ Sec 103
Hydrochloric Acid			5000
Iron(III) Chloride			1000

SARA

CHEMICAL NAME	Section 311	Section 311 / 312 Hazards
	Hazardous Chemical	Acute Chronic Flammable Pressure Reactive
Hydrochloric Acid	Yes	Yes
Iron(II) Chloride	Yes	Yes
Iron(III) Chloride	Yes	Yes

RIGHT TO KNOW

CHEMICAL NAME	STATE											
	CA	CT	FL	IL	LA	NJ	NY	PA	MI	MN	MA	RI
Hydrochloric Acid	Yes				Yes	Yes	Yes	Yes		Yes	Yes	Yes
Iron(III) Chloride	Yes					Yes		Yes			Yes	Yes

CALIFORNIA

WARNING: This Product can expose you to chemicals (Listed below) known to the State of California to cause cancer, birth defects or reproductive harm. For more information go to www.P65Warnings.ca.gov

CHEMICAL NAME	CAS #	Birth Defects	Reproductive Harm	Carcinogen	Developmental
None Listed					

CLEAN AIR WATER ACTS

CHEMICAL NAME	CAS #	Clean Air Acts	Clean Water Acts
		HAP	Ozone Class 1 Ozone Class 2 HS PP TP
Hydrochloric Acid	7647-01-0	Yes	

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Hydrochloric Acid	Yes	Yes	Yes	Yes	Yes	Yes
Iron(II) Chloride	Yes	Yes	Yes	Yes	Yes	Yes
Iron(III) Chloride	Yes	Yes	Yes	Yes	Yes	Yes

SECTION – 16 OTHER INFORMATION**SDS LEGEND DESCRIPTION**

~	Approximately	KD	Kidney Damage (nephropathy)
ACGIH	American Conference of Governmental Industrial Hygienists	LC50	A concentration that is lethal to 50% of a given species in a given time
CAS	Chemical Abstracts Service Registry	LD50	Dose that is lethal to 50% of a given species by a given route of exposure
CEIL	Ceiling Limit (15 minutes)	LEL	Lower Explosive Limit
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act	LD	Liver Damage
CI	Cochlear Impairment	NA	Not Applicable
CNS	Central Nervous System	ND	Not Determined
EC50	Concentration of a chemical that gives half-maximal response	NE	Not Established
EPA	Environmental Protection Agency	NFPA	National Fire Protection Association
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)	NIOSH	National Institute for Occupational Safety and Health
FBG	Full Bunker Gear	NTP	National Toxicology Program
GHS	Globally Harmonized System	OSHA	Occupational Safety and Health Administration
HAP	California Hazardous Air Pollutant Clean Air Act	PEL	Permissible Exposure Limit (OSHA)
HMIS-A	Safety glasses	PNS	Peripheral Nervous System
HMIS-B	Safety glasses, gloves	PP	California Priority Pollutant under the Clean Water Act
HMIS-C	Safety glasses, gloves, chemical apron	REL	Recommended exposure limit (NIOSH)
HMIS-D	Face shield, gloves, chemical apron	RT	Upper Respiratory Tract
HMIS-E	Safety glasses, gloves, dust respirator	Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator	SARA	Superfund Amendments and Reauthorization Act
HMIS-G	Safety glasses, gloves, vapor respirator	STEL	Short Term Exposure Limit (15 minutes)
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator	TC Lo	Lowest concentration that is toxic to a given species in a given time
HMIS-I	Safety glasses, gloves, dust and vapor respirator	TD Lo	Lowest dose that is toxic to a given species
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator	TLV	Threshold Limit Value (ACGIH)
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots	TP	California Toxic Pollutant under the Clean Water Act
HMIS-X	Ask Supervisor	TSCA	Toxic Substances Control Act
HS	California Hazardous Substance under the Clean Water Act	TWA	Time Weighted Average (8 hours) - NOISH (10 hours)
IG / IH	(IG = Ingested) / (IH = Inhaled - Vapors / Mists / Gas)	UEL	Upper Explosive Limit

Direct Colors LLC

and nCites LLC have compiled the information herein from sources believed to be reliable and up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources or the completeness and expressly do not make warranties, nor assume any liability for its use. The information contained herein is provided for reference purposes only and is intended only for persons having relevant technical skills. Because conditions and manner of use are outside of our control, the user is responsible for determining the conditions of safe use of the product. Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries, losses, or damages to persons or property arising from the use of this product or information.

-- End of Safety Data Sheet --

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name DecoGel™ Concrete Acid Stain (Seagrass) **Item**

Product Use Concrete Stain & Dye

Company Name Direct Colors LLC **Office** (877) 255-2656 ext.1
430 E 10th St
Shawnee OK 74801 **Web** www.DirectColors.com

EMERGENCY TELEPHONE NUMBER **INFOTRAC** (800) 535-5053

SECTION – 2 HAZARDS INFORMATION

Pictogram



Signal Word Danger

Hazards **PHYSICAL / HEALTH / ENVIRONMENTAL HAZARD STATEMENTS**

May be corrosive to metals
Causes severe skin burns and eye damage
Causes serious eye damage
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause respiratory irritation
Toxic to aquatic life
Toxic to aquatic life with long lasting effects
May cause damage to organs through prolonged or repeated exposure
nervous systems, by inhalation of dust / mist, or ingestion

HAZARD CATEGORY CLASSIFICATION **CODE**

Category 1 Corrosive to Metals H290
Category 1B Skin & Eye (Corrosion) H314
Category 1 Eye (Damage / Irritation) H318
Category 1 Sensitization (Respiratory) H334
Category 3 STOT Single Exposure H335
Category 2 Acute Toxicity (Aquatic) H401
Category 2 Chronic Toxicity (Aquatic) H411
Category 2 STOT Repeat Exposure H373

Precautions **HANDLING / PROTECTION / FIRE / STORAGE / DISPOSAL**

CODE

Keep out of reach of children P102
Keep only in original container P234
Avoid breathing dust / fume / gas / mist / vapours / spray P261
Do not get in eyes, on skin, or on clothing P262
Wash thoroughly after handling P264
Do not eat, drink or smoke when using this product P270
Use only outdoors or in a well-ventilated area P271
Avoid release to the environment P273
Wear protective gloves / protective clothing / eye protection / face protection P280
In case of inadequate ventilation wear respiratory protection P285
Absorb spillage to prevent material damage P390
Collect spillage P391
Store in a well-ventilated place, Store locked up, Keep container tightly closed P403+P405+P233
Store in corrosive resistant container P406
Dispose of material in accordance with all State and Federal Guidelines and Regulations P501

SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
Hydrochloric Acid	Muriatic Acid	7647-01-0	Water < 70%	1 - 15%
Chromium(III) Chloride	Chromium(III) Chloride Hexahydrate	10060-12-5		0.1 - 10%
Copper(II) Chloride Dihydrate	Cupric Chloride Dihydrate ; Copper Chloride	10125-13-0		1 - 20%
Manganese(II) Chloride	Manganese Dichloride	7773-01-5		0.1 - 10%

SECTION – 4 FIRST AID MEASURES

Eye Contact Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room

Skin Contact Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Be sure to remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention

Inhaled Not applicable under normal use. If irritation is experienced, move person to fresh air

Ingested DO NOT INDUCE VOMITING, rinse mouth with water, and drink small quantities of water, Call a physician, or poison control center, and get medical attention, If victim feels nauseous stop drinking, If vomiting occurs, keep head below hips to prevent aspiration into the lungs

Important Effects	Exposure can / may affect, blood, digestive system, eyes, kidneys, liver, nasal septum, nervous systems, respiratory, skin, spleen
Important Symptoms	Symptoms may include, allergic skin reactions, liver or kidney irregularities, digestive tract burns, corrosive burns to skin or eyes, respiratory irritation, allergic asthmatic breathing reactions, neurological disorders, nasal septum perforation, spleen disorders

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media	Not flammable: Use extinguishing media for surrounding fire
Explosion Hazard	Not applicable
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, copper oxides, hydrogen chloride gas, magnesium oxides
Protective Equipment	Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely, Keep unprotected personnel from entering the hazard area, Ventilate area
Personal Precautions	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
Protective Equipment	Safety Glasses, Gloves, Chemical Apron, Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment
Clean Up Procedures	Small Spills: Use wet vacuum or mop and wringer to pick up spilled material then mop area with clean water, Large Spills: Absorb spill with inert material, place in a chemical waste container, mop area with clean water
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Do not get in eyes, on skin, or clothing, Avoid breathing mist, vapors or fumes, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly with soap and water after handling, Avoid release to the environment
Storage	Keep container closed when not in use, Store in a cool place away from incompatible materials, Store in corrosive resistant container
Incompatible Materials	Incompatible with, alkalies, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong oxidizers, alkaline earth metals, aluminum, zinc

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMITS**

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA (TWA 8)	OSHA (CEIL)	NIOSH (TWA 10)	NIOSH (STEL)	Significant Exposure
Hydrochloric Acid		2 ppm (CEIL)		5 ppm (7 mg/m ³)		5 ppm (CEIL)	ED,SD,RT
Chromium(III) Chloride	(as Cr) 0.5 mg/m ³		(as Cr) 0.5 mg/m ³				
Copper(II) Chloride Dihydrate	(as Cu) 1 mg/m ³		(as Cu) 1 mg/m ³				Dust, Mist
Manganese(II) Chloride	0.1 mg/m ³		5 mg/m ³		1 mg/m ³	3 mg/m ³	CNS

PERSONAL PROTECTION

Eyes	Wear safety glasses or goggles or face shield when handling / using this material
Hands	Wear chemical resistant impervious gloves when handling / using this material
Lungs	Wear a MSHA / NIOSH approved respirator at or above listed TLV's or if irritation is experienced
Body	"If Situation Requires" - Wear chemical resistant impervious protective clothing if exposure is considered to be likely when handling / using this material
Feet	"If Situation Requires" - Wear chemical resistant impervious footwear if exposure is considered to be likely when handling / using this material
Response	Access to a drench shower with eye wash station is a recommended safety precaution for handling / using this type of material
Ventilation	Ventilate to keep vapors of this material below the lowest ppm listed above, If over Threshold Limit Value use a MSHA / NIOSH approved respirator for organic vapor, supplied air or self-contained breathing apparatus

HMIS HAZARD RATINGS

Health	3
Flammability	0
Reactivity	0
Personal Protection	H

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3°C (200°F) - TAG Closed Cup	Specific Gravity / Density	~ 1.23
Flammable Limits (v)	ND	pH (± 0.3)	< 2.0
Auto-Ignition Temp.	ND	Viscosity (mm²s / cSt)	ND
Physical State	Viscous Liquid	Melting Point	ND
Appearance	Blue Green	Boiling Point	ND
Odor	Acidic	Vapor Density (air=1)	ND
Odor Threshold	ND	Vapor Pressure (mmHg)	ND
Solubility	< 78%	Evaporation Rate (nBuAc=1)	ND
Volatiles	< 68%	Partition Coefficient	ND
VOC	0%	Molecular Weight (g/mol)	~ 34.84
LVP-VOC	0%	Decomposition Temperature	ND

SECTION – 10 STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients
Chemical Stability	Stable under normal ambient and anticipated conditions of use
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, alkalies, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong oxidizers, alkaline earth metals, aluminum, zinc
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, copper oxides, hydrogen chloride gas, magnesium oxides

SECTION – 11 TOXICOLOGICAL INFORMATION**ROUTES OF EXPOSURE**

Eyes (Yes), Skin (Yes), Ingestion (Yes), Inhalation (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye damage
Skin	May cause allergic skin reaction, Can cause serious skin damage, dermatitis
Inhalation	Mist, vapor or fumes may cause, respiratory irritation, allergic reactions, asthmatic symptoms
Ingestion	May be harmful if swallowed, May affect target organs

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, burning, pain, or vision impairment
Skin	Causes serious skin damage, dermatitis, allergic skin reaction, ulcerations, corrosive burns
Inhalation	Mist, vapor or fumes may cause, respiratory irritation, allergic reactions, asthmatic symptoms, nasal septum perforation
Ingestion	May be harmful if swallowed, Ingestion may affect, liver, kidneys, spleen, blood, nervous system, Symptoms may include, digestive tract burns, nausea, vomiting, liver or kidney irregularities, neurological disorders, spleen disorders

Acute Tox Calculate	Oral:	3,551 mg/kg	Dermal:	11,439 mg/kg	Inhaled:	> 20 mg/l
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Acute Tox Category Not applicable (Oral >2,000 mg/kg), Not applicable (Dermal >2,000 mg/kg), Not applicable (Inhaled >5 mg/l) Dust or Mist

Target Organs Blood, Kidneys, Liver, Skin, Spleen, Eyes, Respiratory System, Nervous Systems, Nasal Cavities

Medical Conditions Preexisting, eye, skin, blood, respiratory, nervous systems, sinus, sensitization, disorders may be aggravated by exposure to this product

Notes to Physician Treat symptoms, No specific recommendations known

CARCINOGENIC – This product contains concentrations above 0.1% of the following:

CHEMICAL NAME	NTP	ACGIH	IARC	GHS Category
None Listed	NA	NA	NA	NA

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

CHEMICAL NAME	Germ Cell Mutagenicity	Toxic to Reproduction
None Listed	NA	NA

COMPONENTS ACUTE TOXICITY

CHEMICAL NAME	Type	Form	Subject	Result Value	Exposure Time	GHS Category
Hydrochloric Acid	LD50	Oral	Rat	700 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	5,010 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	781 mg/l		(>20 mg/l)
Manganese(II) Chloride	LD50	Oral	Rat (F)	236 mg/kg		3 (>50, ≤300 mg/kg)
Copper(II) Chloride Dihydrate	LD50	Oral	Rat	584 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rabbit	1224 mg/kg		4 (>1000, ≤2000 mg/kg)
Chromium(III) Chloride	LD50	Oral	Rat	1,790 mg/kg		4 (>1000, ≤2000 mg/kg)

SECTION – 12 ECOLOGICAL INFORMATION

CHEMICAL NAME	Type	Subject	Subject Latin	Result Value	Exposure Time	GHS Category
Hydrochloric Acid	LC50	Mosquito Fish	(Gambusia affinis)	282 mg/l	96 Hours	4 (>100 mg/l)
Manganese(II) Chloride	EC50	Water Flea	(Daphnia magna)	9.8 mg/l	48 Hours	2 (>1, ≤10 mg/l)
	EC50	Green Algae	(Pseudokirchneriella s.)	3.83 mg/l	72 Hours	2 (>1, ≤10 mg/l)
Copper(II) Chloride Dihydrate	LC50	Rainbow Trout	(Oncorhynchus mykiss)	0.286 mg/l	96 Hours	1 (≤1 mg/l)
	EC50	Algae	(Pseudokirchneriella s.)	0.05 mg/l	72 Hours	1 (≤1 mg/l)
	NOEC	Water Flea	(Daphnia magna)	0.368 mg/l	21 Days	1 (≤1 mg/l)

Presistence And Degradability When released into the soil, this material is not expected to biodegrade

Bioaccumulative Potential Has low potential for bioaccumulation due to its high solubility in water


Mobility In Soil This material is a mobile liquid

Other Adverse Effects Toxic to aquatic life with long lasting effects

SECTION – 13 DISPOSAL CONSIDERATIONS

Disposal Statement	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER Dispose of any waste in accordance with all State and Federal Guidelines and Regulations
Container Disposal	Empty containers retain product residue (vapors, liquid or solid) observe all precautions when handling, Empty drums should be returned to distributor or taken to an approved waste handling site for recycling or disposal
Material Disposal	This material as supplied, when discarded or disposed of, is a hazardous waste according to Federal Regulations (40 CFR 261) due to its composition containing in some or all of its components, Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate

SECTION – 14 TRANSPORT INFORMATION**DOT CLASSIFICATION**

<u>UN Number</u>		<u>Proper Shipping Name</u> n.o.s. (Chemicals) or "Limits"					
UN 3264		CORROSIVE, LIQUID, ACIDIC, INORGANIC, n.o.s.(Hydrochloric Acid, Copper(II) Chloride)					
<u>Hazard Class</u>	<u>Packing Group</u>	<u>Label Codes</u>	<u>Reportable Quantity (lb)</u>	<u>Response</u>	<u>Marine Pollutant</u>	<u>Hazard Label</u>	<u>Secondary</u>
8	II	Corrosive Liquid	(93) = 10 Cupric Chloride	154	No		

Additional Info:

SECTION – 15 REGULATORY INFORMATION**TSCA**

CHEMICAL NAME	Sec 8(b) Active Inventory	Sec 8(d) Health And Safety	Sec 4(a) Chemical Test Rules	Sec 12(b) Export Notification
Hydrochloric Acid	Yes			
Manganese(II) Chloride	Yes			

REPORTABLE QUANTITIES

CHEMICAL NAME	Extremely Hazardous	Reportable Quantity	Emission Reporting	RCRA Code	RMP TQ Sec 112r
	EPCRA TPQ Sec 302	EPCRA RQ Sec 304	CERCLA RQ Sec 103	TRI Sec 313	
Hydrochloric Acid			5000		
Chromium Compounds			&	313	
Cupric Chloride			10	Yes	

SARA

CHEMICAL NAME	Hazardous Chemical	Acute	Chronic	Flammable	Pressure	Reactive
Hydrochloric Acid	Yes	Yes				
Chromium(III) Chloride	Yes	Yes				
Manganese(II) Chloride	Yes	Yes				

RIGHT TO KNOW

CHEMICAL NAME	CA	CT	FL	IL	LA	NJ	NY	PA	MI	MN	MA	RI	WI
Hydrochloric Acid	Yes				Yes	Yes	Yes	Yes		Yes	Yes	Yes	
Chromium(III) Chlorid				Yes		Yes		Yes			Yes	Yes	
Manganese(II) Chloride								Yes					

CALIFORNIA

WARNING: This Product can expose you to chemicals (Listed below) known to the State of California to cause cancer, birth defects or reproductive harm. For more information go to www.P65Warnings.ca.gov

CHEMICAL NAME	CAS #	Birth Defects	Reproductive Harm	Carcinogen	Developmental
None Listed					

CLEAN AIR WATER ACTS

		Clean Air Acts			Clean Water Acts		
CHEMICAL NAME	CAS #	HAP	Ozone Class 1	Ozone Class 2	HS	PP	TP
Hydrochloric Acid	7647-01-0	Yes					
Chromium(III) Chloride	10060-12-5	Yes					Yes

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Hydrochloric Acid	Yes	Yes	Yes	Yes	Yes	Yes
Chromium(III) Chloride						

SECTION – 16 OTHER INFORMATION**SDS LEGEND DESCRIPTION**

~	Approximately	KD	Kidney Damage (nephropathy)
ACGIH	American Conference of Governmental Industrial Hygienists	LC50	A concentration that is lethal to 50% of a given species in a given time
CAS	Chemical Abstracts Service Registry	LD50	Dose that is lethal to 50% of a given species by a given route of exposure
CEIL	Ceiling Limit (15 minutes)	LEL	Lower Explosive Limit
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act	LD	Liver Damage
CI	Cochlear Impairment	NA	Not Applicable
CNS	Central Nervous System	ND	Not Determined
EC50	Concentration of a chemical that gives half-maximal response	NE	Not Established
EPA	Environmental Protection Agency	NFPA	National Fire Protection Association
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)	NIOSH	National Institute for Occupational Safety and Health
FBG	Full Bunker Gear	NTP	National Toxicology Program
GHS	Globally Harmonized System	OSHA	Occupational Safety and Health Administration
HAP	California Hazardous Air Pollutant Clean Air Act	PEL	Permissible Exposure Limit (OSHA)
HMIS-A	Safety glasses	PNS	Peripheral Nervous System
HMIS-B	Safety glasses, gloves	PP	California Priority Pollutant under the Clean Water Act
HMIS-C	Safety glasses, gloves, chemical apron	REL	Recommended exposure limit (NIOSH)
HMIS-D	Face shield, gloves, chemical apron	RT	Upper Respiratory Tract
HMIS-E	Safety glasses, gloves, dust respirator	Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator	SARA	Superfund Amendments and Reauthorization Act
HMIS-G	Safety glasses, gloves, vapor respirator	STEL	Short Term Exposure Limit (15 minutes)
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator	TC Lo	Lowest concentration that is toxic to a given species in a given time
HMIS-I	Safety glasses, gloves, dust and vapor respirator	TD Lo	Lowest dose that is toxic to a given species
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator	TLV	Threshold Limit Value (ACGIH)
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots	TP	California Toxic Pollutant under the Clean Water Act
HMIS-X	Ask Supervisor	TSCA	Toxic Substances Control Act
HS	California Hazardous Substance under the Clean Water Act	TWA	Time Weighted Average (8 hours) - NOISH (10 hours)
IG / IH	(IG = Ingested) / (IH = Inhaled - Vapors / Mists / Gas)	UEL	Upper Explosive Limit

Direct Colors LLC

and nCites LLC have compiled the information herein from sources believed to be reliable and up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources or the completeness and expressly do not make warranties, nor assume any liability for its use. The information contained herein is provided for reference purposes only and is intended only for persons having relevant technical skills. Because conditions and manner of use are outside of our control, the user is responsible for determining the conditions of safe use of the product. Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries, losses, or damages to persons or property arising from the use of this product or information.

-- End of Safety Data Sheet --

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name DecoGel™ Concrete Acid Stain (Shifting Sand) **Item**

Product Use Concrete Stain & Dye

Company Name Direct Colors LLC **Office** (877) 255-2656 ext.1
430 E 10th St
Shawnee OK 74801 **Web** www.DirectColors.com

EMERGENCY TELEPHONE NUMBER **INFOTRAC** (800) 535-5053

SECTION – 2 HAZARDS INFORMATION

Pictogram



Signal Word Danger

Hazards **PHYSICAL / HEALTH / ENVIRONMENTAL HAZARD STATEMENTS**

May be corrosive to metals
Harmful if swallowed
Causes severe skin burns and eye damage
Causes serious eye damage
May cause respiratory irritation
Toxic to aquatic life
Toxic to aquatic life with long lasting effects
May cause damage to organs through prolonged or repeated exposure
liver, nervous systems, by inhalation of dust / mist, or ingestion

HAZARD CATEGORY CLASSIFICATION **CODE**

Category 1 Corrosive to Metals H290
Category 4 Acute Toxicity (Oral) H302
Category 1B Skin & Eye (Corrosion) H314
Category 1 Eye (Damage / Irritation) H318
Category 3 STOT Single Exposure H335
Category 2 Acute Toxicity (Aquatic) H401
Category 2 Chronic Toxicity (Aquatic) H411
Category 2 STOT Repeat Exposure H373

Precautions **HANDLING / PROTECTION / FIRE / STORAGE / DISPOSAL**

CODE

Keep out of reach of children P102
Keep only in original container P234
Avoid breathing dust / fume / gas / mist / vapours / spray P261
Do not get in eyes, on skin, or on clothing P262
Wash thoroughly after handling P264
Do not eat, drink or smoke when using this product P270
Use only outdoors or in a well-ventilated area P271
Avoid release to the environment P273
Wear protective gloves / protective clothing / eye protection / face protection P280
In case of inadequate ventilation wear respiratory protection P285
Absorb spillage to prevent material damage P390
Collect spillage P391
Store in a well-ventilated place, Store locked up, Keep container tightly closed P403+P405+P233
Store in corrosive resistant container P406
Dispose of material in accordance with all State and Federal Guidelines and Regulations P501

SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
Hydrochloric Acid	Muriatic Acid	7647-01-0	Water < 70%	1 - 15%
Copper(II) Chloride Dihydrate	Cupric Chloride Dihydrate ; Copper Chloride	10125-13-0		1 - 20%
Iron(II) Chloride	Ferrous Chloride Tetrahydrate	13478-10-9		1 - 20%
Manganese(II) Chloride	Manganese Dichloride	7773-01-5		1 - 10%

SECTION – 4 FIRST AID MEASURES

Eye Contact Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room

Skin Contact Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Be sure to remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention

Inhaled Not applicable under normal use. If irritation is experienced, move person to fresh air

Ingested	DO NOT INDUCE VOMITING, unless directed to do so by medical personnel, If person is fully conscious, rinse mouth with water, and drink small quantities of water, Call a physician, or poison control center, and get medical attention, If victim feels nauseous stop drinking, If vomiting occurs, keep head below hips to prevent aspiration into the lungs
Important Effects	Exposure can / may affect, blood, digestive system, eyes, kidneys, liver, nasal septum, nervous systems, respiratory, skin, spleen
Important Symptoms	Symptoms may include, liver or kidney irregularities, digestive tract burns, corrosive burns to skin or eyes, respiratory irritation, blood disorders, neurological disorders, nasal septum perforation, spleen disorders

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media	Not flammable: Use extinguishing media for surrounding fire
Explosion Hazard	Not applicable
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, copper oxides, hydrogen chloride gas, Iron oxides, magnesium oxides
Protective Equipment	Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely, Keep unprotected personnel from entering the hazard area, Ventilate area
Personal Precautions	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
Protective Equipment	Safety Glasses, Gloves, Chemical Apron, Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment
Clean Up Procedures	Small Spills: Use wet vacuum or mop and wringer to pick up spilled material then mop area with clean water, Large Spills: Absorb spill with inert material, place in a chemical waste container, mop area with clean water
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Do not get in eyes, on skin, or clothing, Avoid breathing mist, vapors or fumes, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly with soap and water after handling, Avoid release to the environment
Storage	Keep container closed when not in use, Store in a cool place away from incompatible materials, Store in corrosive resistant container
Incompatible Materials	Incompatible with, alkalies, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong acids, strong oxidizing agents, alkaline earth metals, aluminum, zinc

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMITS**

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA (TWA 8)	OSHA (CEIL)	NIOSH (TWA 10)	NIOSH (STEL)	Significant Exposure
Hydrochloric Acid		2 ppm (CEIL)		5 ppm (7 mg/m ³)		5 ppm (CEIL)	ED,SD,RT
Copper(II) Chloride Dihydrate	(as Cu) 1 mg/m ³		(as Cu) 1 mg/m ³				Dust, Mist
Iron(II) Chloride	(as Fe) 1mg/m ³						
Manganese(II) Chloride	0.1 mg/m ³		5 mg/m ³		1 mg/m ³	3 mg/m ³	CNS

PERSONAL PROTECTION

Eyes	Wear safety glasses or goggles or face shield when handling / using this material
Hands	Wear chemical resistant impervious gloves when handling / using this material
Lungs	Wear a MSHA / NIOSH approved respirator at or above listed TLV's or if irritation is experienced
Body	"If Situation Requires" - Wear chemical resistant impervious protective clothing if exposure is considered to be likely when handling / using this material
Feet	"If Situation Requires" - Wear chemical resistant impervious footwear if exposure is considered to be likely when handling / using this material
Response	Access to a drench shower with eye wash station is a recommended safety precaution for handling / using this type of material
Ventilation	Ventilate to keep vapors of this material below the lowest ppm listed above, If over Threshold Limit Value use a MSHA / NIOSH approved respirator for organic vapor, supplied air or self-contained breathing apparatus

HMIS HAZARD RATINGS

Health	3
Flammability	0
Reactivity	0
Personal Protection	H

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3°C (200°F) - TAG Closed Cup	Specific Gravity / Density	~ 1.398
Flammable Limits (v)	ND	pH (± 0.3)	< 2.0
Auto-Ignition Temp.	ND	Viscosity (mm²s / cSt)	ND
Physical State	Viscous Liquid	Melting Point	ND
Appearance	Beige	Boiling Point	ND
Odor	Acidic	Vapor Density (air=1)	ND
Odor Threshold	ND	Vapor Pressure (mmHg)	ND
Solubility	< 76%	Evaporation Rate (nBuAc=1)	ND
Volatiles	< 60%	Partition Coefficient	ND
VOC	0%	Molecular Weight (g/mol)	~ 75.48
LVP-VOC	0%	Decomposition Temperature	ND

SECTION – 10 STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients
Chemical Stability	Stable under normal ambient and anticipated conditions of use
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, alkalis, amines, bases, hexalithium disilicide, hydrogen peroxide, metal acetylides, permanganates, potassium, sodium, strong acids, strong oxidizing agents, alkaline earth metals, aluminum, zinc
Hazardous Decomposition	Burning or thermal decomposition can produce, chlorine, copper oxides, hydrogen chloride gas, Iron oxides, magnesium oxides

SECTION – 11 TOXICOLOGICAL INFORMATION**ROUTES OF EXPOSURE**

Eyes (Yes), Skin (Yes), Ingestion (Yes), Inhalation (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye damage
Skin	Can cause serious skin damage, dermatitis
Inhalation	Mist, vapor or fumes may cause, respiratory irritation
Ingestion	Harmful if swallowed, May affect target organs

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, corneal injury, partial or complete blindness
Skin	Causes serious skin damage, dermatitis, ulcerations, corrosive burns
Inhalation	Mist, vapor or fumes may cause, respiratory irritation, nasal septum perforation
Ingestion	Harmful if swallowed, Ingestion may affect, liver, kidneys, spleen, blood, nervous system, Symptoms may include, digestive tract burns, nausea, vomiting, liver or kidney irregularities, neurological disorders, spleen disorders
Acute Tox Calculate	Oral: 1,706 mg/kg Dermal: 8,559 mg/kg Inhaled: > 20 mg/l
Acute Tox Category	Category 4 (Oral >300, ≤2,000 mg/kg), Not applicable (Dermal >2,000 mg/kg), Not applicable (Inhaled >5 mg/l) Dust or Mist
Target Organs	Blood, Kidneys, Liver, Skin, Spleen, Eyes, Respiratory System, Nervous Systems, Nasal Cavities
Medical Conditions	Preexisting, eye, skin, liver, kidney, blood, respiratory, spleen, nervous systems, sinus, disorders may be aggravated by exposure to this product
Notes to Physician	Treat symptoms, No specific recommendations known

CARCINOGENIC – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>NTP</u>	<u>ACGIH</u>	<u>IARC</u>	<u>GHS Category</u>
None Listed	NA	NA	NA	NA

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

<u>CHEMICAL NAME</u>	<u>Germ Cell Mutagenicity</u>	<u>Toxic to Reproduction</u>
None Listed	NA	NA

COMPONENTS ACUTE TOXICITY

<u>CHEMICAL NAME</u>	<u>Type</u>	<u>Form</u>	<u>Subject</u>	<u>Result Value</u>	<u>Exposure Time</u>	<u>GHS Category</u>
Hydrochloric Acid	LD50	Oral	Rat	700 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rat	5,010 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	781 mg/l		(>20 mg/l)
Iron(II) Chloride	LD50	Oral	Rat	500 mg/kg	4 Hours (Mist)	4 (>300, ≤2000 mg/kg)
Manganese(II) Chloride	LD50	Oral	Rat (F)	236 mg/kg		3 (>50, ≤300 mg/kg)
Copper(II) Chloride Dihydrate	LD50	Oral	Rat	584 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rabbit	1224 mg/kg		4 (>1000, ≤2000 mg/kg)


SECTION – 12 ECOLOGICAL INFORMATION

CHEMICAL NAME	Type	Subject	Subject Latin	Result Value	Exposure Time	GHS Category
Hydrochloric Acid	LC50	Mosquito Fish	(Gambusia affinis)	282 mg/l	96 Hours	4 (>100 mg/l)
Iron(II) Chloride	LC50	Japanese Ricefish	(Oryzias latipes)	46 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	EC50	Green Algae	(Pseudokirchneriella s.)	6.9 mg/l	72 Hours	2 (>1, ≤10 mg/l)
	EC50	Water Flea	(Daphnia magna)	19 mg/l	48 Hours	3 (>10, ≤100 mg/l)
Manganese(II) Chloride	EC50	Water Flea	(Daphnia magna)	9.8 mg/l	48 Hours	2 (>1, ≤10 mg/l)
	EC50	Green Algae	(Pseudokirchneriella s.)	3.83 mg/l	72 Hours	2 (>1, ≤10 mg/l)
Copper(II) Chloride Dihydrate	LC50	Rainbow Trout	(Oncorhynchus mykiss)	0.286 mg/l	96 Hours	1 (≤1 mg/l)
	EC50	Algae	(Pseudokirchneriella s.)	0.05 mg/l	72 Hours	1 (≤1 mg/l)
	NOEC	Water Flea	(Daphnia magna)	0.368 mg/l	21 Days	1 (≤1 mg/l)
Presistence And Degradability	When released into the soil, this material is not expected to biodegrade					
Bioaccumulative Potential	Has low potential for bioaccumulation due to its high solubility in water					
Mobility In Soil	This material is a mobile liquid					
Other Adverse Effects	Toxic to aquatic life with long lasting effects					

SECTION – 13 DISPOSAL CONSIDERATIONS

Disposal Statement	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER Dispose of any waste in accordance with all State and Federal Guidelines and Regulations
Container Disposal	Empty containers retain product residue (vapors, liquid or solid) observe all precautions when handling, Empty drums should be returned to distributor or taken to an approved waste handling site for recycling or disposal
Material Disposal	This material as supplied, when discarded or disposed of, is a hazardous waste according to Federal Regulations (40 CFR 261) due to its composition containing in some or all of its components, Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate

SECTION – 14 TRANSPORT INFORMATION**DOT CLASSIFICATION**

<u>UN Number</u>		<u>Proper Shipping Name</u> n.o.s. (Chemicals) or "Limits"					
UN 3264		CORROSIVE, LIQUID, ACIDIC, INORGANIC, n.o.s.(Hydrochloric Acid, Copper(II) Chloride)					
<u>Hazard Class</u>	<u>Packing Group</u>	<u>Label Codes</u>	<u>Reportable Quantity (lb)</u>	<u>Response</u>	<u>Marine Pollutant</u>	<u>Hazard Label</u>	<u>Secondary</u>
8	II	Corrosive Liquid	(70) = 10 Cupric Chloride	154	No		
Additional Info:							

SECTION – 15 REGULATORY INFORMATION**TSCA**

CHEMICAL NAME	Sec 8(b) Active Inventory	Sec 8(d) Health And Safety	Sec 4(a) Chemical Test Rules	Sec 12(b) Export Notification
Hydrochloric Acid	Yes			
Iron(II) Chloride	Yes			
Manganese(II) Chloride	Yes			

REPORTABLE QUANTITIES

REPORTABLE QUANTITIES		Extremely Hazardous	Reportable Quantity	Emission Reporting		
CHEMICAL NAME	EPCRA TPQ Sec 302	EPCRA RQ Sec 304	CERCLA RQ Sec 103	TRI Sec 313	RCRA Code	RMP TQ Sec 112r
Hydrochloric Acid			5000			
Cupric Chloride			10	Yes		

SARA

SARA	Section 311		Section 311 / 312 Hazards			
CHEMICAL NAME	Hazardous Chemical	Acute	Chronic	Flammable	Pressure	Reactive
Hydrochloric Acid	Yes	Yes				
Iron(II) Chloride	Yes	Yes	Yes			
Manganese(II) Chloride	Yes	Yes				

RIGHT TO KNOW

RIGHT TO KNOW					STATE								
CHEMICAL NAME	CA	CT	FL	IL	LA	NJ	NY	PA	MI	MN	MA	RI	WI
Hydrochloric Acid	Yes				Yes	Yes	Yes	Yes		Yes	Yes	Yes	
Manganese(II) Chloride								Yes					

CALIFORNIA

WARNING: This Product can expose you to chemicals (Listed below) known to the State of California to cause cancer, birth defects or reproductive harm. For more information go to www.P65Warnings.ca.gov

CHEMICAL NAME	CAS #	Birth Defects	Reproductive Harm	Carcinogen	Developmental
None Listed					

CLEAN AIR WATER ACTS

CHEMICAL NAME	CAS #	HAP	Ozone Class 1	Ozone Class 2	HS	PP	TP
Hydrochloric Acid	7647-01-0	Yes					

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Hydrochloric Acid	Yes	Yes	Yes	Yes	Yes	Yes
Iron(II) Chloride	Yes	Yes	Yes	Yes	Yes	Yes

SECTION – 16 OTHER INFORMATION**SDS** **LEGEND DESCRIPTION**

~	Approximately	KD	Kidney Damage (nephropathy)
ACGIH	American Conference of Governmental Industrial Hygienists	LC50	A concentration that is lethal to 50% of a given species in a given time
CAS	Chemical Abstracts Service Registry	LD50	Dose that is lethal to 50% of a given species by a given route of exposure
CEIL	Ceiling Limit (15 minutes)	LEL	Lower Explosive Limit
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act	LD	Liver Damage
CI	Cochlear Impairment	NA	Not Applicable
CNS	Central Nervous System	ND	Not Determined
EC50	Concentration of a chemical that gives half-maximal response	NE	Not Established
EPA	Environmental Protection Agency	NFPA	National Fire Protection Association
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)	NIOSH	National Institute for Occupational Safety and Health
FBG	Full Bunker Gear	NTP	National Toxicology Program
GHS	Globally Harmonized System	OSHA	Occupational Safety and Health Administration
HAP	California Hazardous Air Pollutant Clean Air Act	PEL	Permissible Exposure Limit (OSHA)
HMIS-A	Safety glasses	PNS	Peripheral Nervous System
HMIS-B	Safety glasses, gloves	PP	California Priority Pollutant under the Clean Water Act
HMIS-C	Safety glasses, gloves, chemical apron	REL	Recommended exposure limit (NIOSH)
HMIS-D	Face shield, gloves, chemical apron	RT	Upper Respiratory Tract
HMIS-E	Safety glasses, gloves, dust respirator	Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator	SARA	Superfund Amendments and Reauthorization Act
HMIS-G	Safety glasses, gloves, vapor respirator	STEL	Short Term Exposure Limit (15 minutes)
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator	TC Lo	Lowest concentration that is toxic to a given species in a given time
HMIS-I	Safety glasses, gloves, dust and vapor respirator	TD Lo	Lowest dose that is toxic to a given species
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator	TLV	Threshold Limit Value (ACGIH)
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots	TP	California Toxic Pollutant under the Clean Water Act
HMIS-X	Ask Supervisor	TSCA	Toxic Substances Control Act
HS	California Hazardous Substance under the Clean Water Act	TWA	Time Weighted Average (8 hours) - NOISH (10 hours)
IG / IH	(IG = Ingested) / (IH = Inhaled - Vapors / Mists / Gas)	UEL	Upper Explosive Limit

Direct Colors LLC

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-- End of Safety Data Sheet --