

**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](http://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 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  
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 - 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**

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

**SECTION – 6 ACCIDENTAL RELEASE MEASURES**

<b>Emergency Procedures</b>	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
<b>Personal Precautions</b>	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
<b>Protective Equipment</b>	Safety Glasses, Gloves, Chemical Apron, Rubber Boots
<b>Containment</b>	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment
<b>Clean Up Procedures</b>	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
<b>Disposal</b>	Dispose of material in accordance with all State and Federal Guidelines and Regulations

**SECTION – 7 HANDLING AND STORAGE**

<b>Handling</b>	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
<b>Storage</b>	Keep container closed when not in use, Store in a cool place away from incompatible materials, Store in corrosive resistant container
<b>Incompatible Materials</b>	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 <sup>3</sup> )		5 ppm (CEIL)	ED,SD,RT
Iron(II) Chloride	(as Fe) 1mg/m <sup>3</sup>						
Iron(III) Chloride			(as Fe) 1 mg/m <sup>3</sup>				

**PERSONAL PROTECTION****HMS HAZARD RATINGS**

Health	3
Flammability	0
Reactivity	0
Personal Protection	H

<b>Eyes</b>	Wear safety glasses or goggles or face shield when handling / using this material
<b>Hands</b>	Wear chemical resistant impervious gloves when handling / using this material
<b>Lungs</b>	Wear a MSHA / NIOSH approved respirator at or above listed TLV's or if irritation is experienced
<b>Body</b>	"If Situation Requires" - Wear chemical resistant impervious protective clothing if exposure is considered to be likely when handling / using this material
<b>Feet</b>	"If Situation Requires" - Wear chemical resistant impervious footwear if exposure is considered to be likely when handling / using this material
<b>Response</b>	Access to a drench shower with eye wash station is a recommended safety precaution for handling / using this type of material
<b>Ventilation</b>	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**

<b>Flash Point</b>	> 93.3°C (200°F) - TAG Closed Cup	<b>Specific Gravity / Density</b>	~ 1.12
<b>Flammable Limits (v)</b>	ND	<b>pH (± 0.3)</b>	< 2.0
<b>Auto-Ignition Temp.</b>	ND	<b>Viscosity (mm<sup>2</sup>s / cSt)</b>	ND
<b>Physical State</b>	Viscous Liquid	<b>Melting Point</b>	ND
<b>Appearance</b>	Tan	<b>Boiling Point</b>	ND
<b>Odor</b>	Acidic	<b>Vapor Density (air=1)</b>	ND
<b>Odor Threshold</b>	ND	<b>Vapor Pressure (mmHg)</b>	ND
<b>Solubility</b>	< 80%	<b>Evaporation Rate (nBuAc=1)</b>	ND
<b>Volatiles</b>	< 75%	<b>Partition Coefficient</b>	ND
<b>VOC</b>	0%	<b>Molecular Weight (g/mol)</b>	~ 21.59
<b>LVP-VOC</b>	0%	<b>Decomposition Temperature</b>	ND

**SECTION – 10 STABILITY AND REACTIVITY**

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

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

**CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE**

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

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

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

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

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

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

**COMPONENTS ACUTE TOXICITY**

<b><u>CHEMICAL NAME</u></b>	<b><u>Type</u></b>	<b><u>Form</u></b>	<b><u>Subject</u></b>	<b><u>Result Value</u></b>	<b><u>Exposure Time</u></b>	<b><u>GHS Category</u></b>
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**

<b><u>CHEMICAL NAME</u></b>	<b><u>Type</u></b>	<b><u>Subject</u></b>	<b><u>Subject Latin</u></b>	<b><u>Result Value</u></b>	<b><u>Exposure Time</u></b>	<b><u>GHS Category</u></b>
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)
<b>Presistence And Degradability</b>	When released into the soil, this material is not expected to biodegrade					
<b>Bioaccumulative Potential</b>	Has low potential for bioaccumulation due to its high solubility in water					
<b>Mobility In Soil</b>	This material is a mobile liquid					
<b>Other Adverse Effects</b>	Toxic to aquatic life with long lasting effects					

**SECTION – 13 DISPOSAL CONSIDERATIONS**

<b>Disposal Statement</b>	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
<b>Container Disposal</b>	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
<b>Material Disposal</b>	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**

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

**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	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](http://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
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 --