SAFETY DATA SHEET

Acrylic Sealer, Solvent-Based, Gloss **Revision Date** 6/6/2021

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name **Acrylic Sealer, Solvent-Based, Gloss** **Item**

Product Use Concrete Sealer

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	HAZARD CATEGORY CLASSIFICATION		CODE
Flammable liquid and vapor	Category 3	Flammable Liquids	H226
May be fatal if swallowed and enters airways	Category 1	Aspiration Toxicity	H304
Causes skin irritation	Category 2	Skin (Corrosion / Irritation)	H315
May cause an allergic skin reaction	Category 1	Sensitization (Skin)	H317
Causes serious eye irritation	Category 2A	Eye (Damage / Irritation)	H319
May cause respiratory irritation	Category 3	STOT Single Exposure	H335
May cause drowsiness or dizziness	Category 3	STOT Single Exposure	H336
Suspected of causing cancer	Category 2	Carcinogenicity	H351
Suspected of damaging fertility or the unborn child	Category 2	Toxic To Reproduction	H361
Toxic to aquatic life	Category 2	Acute Toxicity (Aquatic)	H401
Toxic to aquatic life with long lasting effects	Category 2	Chronic Toxicity (Aquatic)	H411
May cause damage to organs *brain (neurological), central nervous system*	Category 2	STOT Single Exposure	H371
Causes damage to organs through prolonged or repeated exposure *auditory system, central nervous system, hematopoietic system (blood forming), kidneys, liver, respiratory system*	Category 1	STOT Repeat Exposure	H372

Precautions

HANDLING / PROTECTION / FIRE / STORAGE / DISPOSAL	CODE
Keep out of reach of children	P102
Obtain special instructions before use	P201
Do not handle until all safety precautions have been read and understood	P202
Keep away from heat / sparks / open flames / hot surfaces – No smoking	P210
Keep container tightly closed	P233
Ground / bond container and receiving equipment	P240
Use explosion-proof electrical / ventilating / lighting /or /equipment	P241
Use only non-sparking tools	P242
Take precautionary measures against static discharge	P243
Avoid breathing dust / fume / gas / mist / vapours / spray	P261
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
In case of fire: Use dry chemicals, CO2, alcohol foam. Water spray to cool or protect exposed materials	P370+P378
Collect spillage	P391
Store in a well-ventilated place, Store locked up, Keep container tightly closed, Keep cool	P403+P405+P233+P235
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
Acrylic Resin-Poly Based		28262-63-7	Methyl Methacrylate ; n-Butyl Methacrylate ; Methacrylic Acid	10 - 50%
Xylenes	Xylol ; Methyl Toluene ; Dimethylbenzene	1330-20-7	Ethylbenzene < 30% ; Benzene < 0.1% ; Toluene < 0.1%	10 - 90%
Light Aromatic Solvent Naphtha	Solvent naphtha (petroleum) light aromatic	64742-95-6	1,2,4-Trimethylbenzene < 27% ; Cumene < 2% m-Ethyltoluene < 15% ; 1,3,5-Trimethylbenzene < 7% 1-Ethyl-2-Methylbenzene < 9% ; p-Ethyltoluene < 7%	10 - 90%

SECTION – 4 FIRST AID MEASURES

Eye Contact Immediately flush eyes with cold water for several minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, If irritation persists seek medical aid

Skin Contact Wash contaminated skin with plenty of soap and water, 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

Aspiration Hazard Aspiration into the lungs can cause severe lung damage and is a medical emergency, If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into the lungs, Never give anything by mouth to an unconscious person. Call a physician or hospital emergency room immediately, If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing

Important Effects Exposure can / may affect, auditory system, central nervous system, hematopoietic system (blood forming), kidneys, liver, respiratory

Important Symptoms Symptoms may include, auditory effects, central nervous system depression, liver or kidney irregulatories, blood disorders, respiratory irritation

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media SUITABLE: Use DRY chemicals, CO2 or alcohol foam, Water spray to cool or protect exposed materials, UNSUITABLE: Avoid using a water stream. Product will float upon water and could spread any fire

Explosion Hazard Flammable liquid and vapor, May flash or explode if ignited in an enclosed area, May form flammable or explosive vapor-air mixture, Flashback along vapor trail may occur, Containers may explode or erupt during a fire when heated excessively, Product will float and can be reignited on surface water

Hazardous Decomposition Burning or thermal decomposition can produce, aldehydes, carbon oxides, toxic fumes, unburned hydrocarbons

Protective Equipment Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

FLAMMABLE LIQUIDS HAZARD CLASSIFICATION

Criteria	Flash point ≥ 23°C (73°F) and ≤ 37.8°C (100°F)
NFPA	Class IC
GHS	Category 3
WHMIS	Class B-2

NFPA HAZARD RATINGS

Health	2
Flammability	3
Reactivity	0
Special Hazards	

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures Warn personnel to move away and stay upwind from spill, Stop spill or release only if it can be done safely, Keep unprotected personnel from entering the hazard area, Eliminate ignition sources and ventilate area

Personal Precautions Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill, Contaminated surfaces will be extremely slippery

Protective Equipment Safety Glasses, Chemical Gloves, Approved Respirator, Chemical Apron, Rubber Boots

Containment Use sand or inert non-combustible absorbent pads to prevent spill from spreading, Prevent spill from entering the environment, waterways, sewers, basements or confined areas

Clean Up Procedures Use sand or inert non-combustible absorbent pads or material. Collect product using non-sparking tools and place into approved container for proper disposal

Disposal Dispose of material in accordance with all State and Federal Guidelines and Regulations, Contact a licensed waste disposal contractor for proper disposal

SECTION – 7 HANDLING AND STORAGE

Handling Keep away from incompatible materials, heat, sparks, electrical equipment, fire and all ignition sources, Do not get in eyes, on skin, or clothing, or breathe mist, vapor or fumes, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly after handling, Use only non-sparking tools, Avoid free fall of liquid, Ground containers when transferring, Empty containers are very hazardous, Do not flame cut, saw or drill. Refer to NFPA-704 and/or API RP 2003 for specific bonding and grounding requirements

Storage Keep container closed when not in use, Store in a cool, well-ventilated area and away from incompatible materials, Store away from heat, sparks, open flames or hot surfaces, Store below 49ºC (120ºF) and in accordance with Class IC Flammable Liquids (GHS Category 3)

Incompatible Materials Incompatible with, alkalies, amines, halogens, ketones, nitric acid, oxidizers, strong acids, strong reducing agents

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
Xylenes	100 ppm	150 ppm	100 ppm (435 mg/m³)	150 ppm (655 mg/m³)	100 ppm	150 ppm	RT,CNS
Acrylic Resin-Poly Based			(T Dust) 15 mg/m³	(R Dust) 5 mg/m³			RT,SS
1,2,4-Trimethylbenzene	25 ppm (125 mg/m³)						RT
Ethylbenzene	20 ppm		100 ppm (435 mg/m³)		100 ppm	125 ppm	RT,SA
Cumene	50 ppm		50 ppm (245 mg/m³)		50 ppm		SA, RT,CNS
Toluene	20 ppm		200 ppm	300 ppm	100 ppm	150 ppm	SA,CNS

PERSONAL PROTECTION

HMIS HAZARD RATINGS

Health	2
Flammability	3
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
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	32.7ºC (90.8ºF) - Pensky-Marten Closed Cup	**Specific Gravity / Density**	~ 0.93
Flammable Limits (v)	Lower: 1.2%, Upper: 6.8%	**pH (± 0.3)**	NA
Auto-Ignition Temp.	473ºC (833ºF)	**Viscosity (mm²s / cSt)**	ND
Physical State	Viscous Liquid	**Melting Point**	ND
Appearance	Clear	**Boiling Point**	ND
Odor	Solvent	**Vapor Density (air=1)**	ND
Odor Threshold	ND	**Vapor Pressure (mmHg)**	ND
Solubility	< 0.05%	**Evaporation Rate (nBuAc=1)**	ND
Volatiles	< 78%	**Partition Coefficient**	ND
VOC	< 78%	**Molecular Weight (g/mol)**	~ 94.7
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	Heat sources, sparks, flame or static discharge and incompatible materials
Incompatible Materials	Incompatible with, alkalies, amines, halogens, ketones, nitric acid, oxidizers, strong acids, strong reducing agents
Hazardous Decomposition	Burning or thermal decomposition can produce, aldehydes, carbon oxides, toxic fumes, unburned hydrocarbons

SECTION – 11 TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE

Eyes (Yes), Skin (Yes), Ingestion (Yes "Aspiration Hazard"), Inhalation (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Can cause serious eye irritation
Skin	May cause allergic skin reaction, Can cause skin irritation
Inhalation	Mist, vapor or fumes may cause, respiratory irritation, drowsiness or dizziness
Ingestion	May be fatal if swallowed and enters airways, Ingestion may affect target organs

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye irritation, redness, burning, or pain
Skin	May cause allergic skin reaction, Causes skin irritation, defatting of the skin which may lead to dermatitis
Inhalation	Mist, vapor or fumes may cause, respiratory irritation, drowsiness or dizziness, Can affect target organs, auditory system, blood, liver, kidneys
Ingestion	May be fatal if swallowed and enters airways, Ingestion can affect, liver, kidneys, blood, auditory system, central nervous system, Symptoms may include, nausea, vomiting, abdominal pain, central nervous system depression, liver or kidney irregulatories

Acute Tox Calculated **Oral:** > 5,000 mg/kg **Dermal:** > 2,000 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 >20 mg/l) Vapors

Target Organs Blood, Kidneys, Liver, Skin, Auditory System, Eyes, Respiratory System

Medical Conditions Preexisting, eye, skin, liver, kidney, central nervous system, blood, respiratory, hearing, disorders may be aggravated by exposure to this product

Notes to Physician Contains petroleum distillates, vomiting may cause aspiration pneumonia

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

CHEMICAL NAME	NTP	ACGIH	IARC	GHS Category
Ethylbenzene		A3 (Confirmed for animal)	2B (Possible for human)	2 (Suspected human)
Cumene	R (Anticipated to be)		2B (Possible for human)	2 (Suspected human)

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

CHEMICAL NAME	Germ Cell Mutagenicity	Toxic to Reproduction
Toluene		2 (Suspected of damaging fertility or the unborn child)

COMPONENTS ACUTE TOXICITY

CHEMICAL NAME	Type	Form	Subject	Result Value	Exposure Time	GHS Category
Toluene	LD50	Oral	Rat	5,580 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	28.1 mg/l	4 Hours (Vapor)	(>20 mg/l)
	LC50	Dermal	Rabbit	12,196 mg/kg		(>2000 mg/kg)
Xylene (All Isomers)	LD50	Oral	Rat	4,300 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	21.7 mg/l	4 Hours (Vapor)	(>20 mg/l)
	LD50	Dermal	Rabbit	1,700 mg/kg		4 (>1000, ≤2000 mg/kg)
Ethylbenzene	LD50	Oral	Rat	3,500 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	17.2 mg/l	4 Hours (Vapor)	4 (>10, ≤20 mg/l)
	LD50	Dermal	Rat	15,433 mg/kg		(>2000 mg/kg)
1,2,4-Trimethylbenzene	LD50	Oral	Rat	5,000 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Rat	18 mg/l	4 Hours (Vapor)	4 (>10, ≤20 mg/l)
	LD50	Dermal	Rabbit	> 3160 mg/kg		(>2000 mg/kg)
Cumene	LD50	Oral	Rat	2,260 mg/kg		(>2000 mg/kg)
	LD50	Dermal	Rabbit	12,300 mg/kg		(>2000 mg/kg)
	LC50	Inhaled	Mouse	17.5 mg/l	4 Hours (Vapor)	4 (>10, ≤20 mg/l)
Light Aromatic Solvent Naphtha	LD50	Oral	Rat	8,400 mg/kg		(>2000 mg/kg)
	LD50	Inhaled	Rat	20.48 mg/l	4 Hours (Vapor)	(>20 mg/l)
	LD50	Dermal	Rat	> 2,000 mg/kg		(>2000 mg/kg)
Acrylic Resin-Poly Based			No Data Available			

SECTION – 12 ECOLOGICAL INFORMATION

CHEMICAL NAME	Type	Subject	Subject Latin	Result Value	Exposure Time	GHS Category
Toluene	LC50	Fish	(Gambusia affinis)	10 to 100 mg/l	96 Hours	3 (>10, ≤100 mg/l)
	LC50	Rainbow Trout	(Oncorhynchus mykiss)	538 mg/l	96 Hours	4 (>100 mg/l)
	EC50	Water Flea	(Daphnia magna)	6.56 mg/l	48 Hours	2 (>1, ≤10 mg/l)
Xylene (All Isomers)	EC50	Water Flea	(Daphnia magna)	8.2 mg/l	96 Hours	2 (>1, ≤10 mg/l)
	LC50	Rainbow Trout	(Oncorhynchus mykiss)	4 mg/l	96 Hours	2 (>1, ≤10 mg/l)
Ethylbenzene	EC50	Water Flea	(Daphnia magna)	1.8 mg/l	48 Hours	2 (>1, ≤10 mg/l)
1,2,4-Trimethylbenzene	EC50	Water Flea	(Daphnia magna)	3.6 mg/l	48 Hours	2 (>1, ≤10 mg/l)
	LC50	Fathead Minnow	(Pimephales promelas)	7.72 mg/l	96 Hours	2 (>1, ≤10 mg/l)
Cumene	LC50	Rainbow Trout	(Oncorhynchus mykiss)	2.7 mg/l	96 Hours	2 (>1, ≤10 mg/l)
	EC50	Algae	(Pseudokirchneriella S.)	2.6 mg/l	72 Hours	2 (>1, ≤10 mg/l)
	EC50	Water Flea	(Daphnia magna)	10.6 mg/l	48 Hours	3 (>10, ≤100 mg/l)
Light Aromatic Solvent Naphtha	LC50	Rainbow Trout	(Oncorhynchus mykiss)	9.2 mg/l	96 Hours	2 (>1, ≤10 mg/l)
	LC50	Water Flea	(Daphnia magna)	6.14 mg/l	48 Hours	2 (>1, ≤10 mg/l)
Acrylic Resin-Poly Based			No Data Available			

Presistence And Degradability Hydrocarbons from this product which do partition to air are expected to rapidly photodegrade

Bioaccumulative Potential There is no evidence to suggest bioaccumulation will occur

Mobility In Soil Low solubility and floats and is expected to migrate from water to land, Expected to partition to sediment and wastewater solids

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 ignitability and due to the 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, The transportation, storage, treatment and disposal of RCRA waster material must be conducted in compliance with 40 CFR 262, 263, 264 and 270, Disposal can only occur in properly permitted facilities, 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 1268	PETROLEUM DISTILLATES, n.o.s.(Xylenes, Hydrocarbons)

Hazard Class	Packing Group	Label Codes	Reportable Quantity (lb)	Response	Marine Pollutant	Hazard Label	Secondary
3	III	Flammable Liquid	(317) = Xylenes	128	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
Xylene (All Isomers)	Yes			
Light Aromatic Solvent Naphtha	Yes			
1,2,4-Trimethylbenzene	Yes			
Ethylbenzene	Yes			
Cumene	Yes			
Toluene	Yes	Yes		

REPORTABLE QUANTITIES

CHEMICAL NAME	Extremely Hazardous EPCRA TPQ Sec 302	Extremely Hazardous EPCRA RQ Sec 304	Reportable Quantity CERCLA RQ Sec 103	Emission Reporting TRI Sec 313	RCRA Code	RMP TQ Sec 112r
Toluene			1000	Yes	U220	
Xylene (All Isomers)			100	Yes	U239	
Ethylbenzene			1000	Yes		
Cumene			5000	Yes	U055	
1,2,4-Trimethylbenzene				Yes		

SARA

CHEMICAL NAME	Section 311 Hazardous Chemical	Section 311 / 312 Hazards Acute	Chronic	Flammable	Pressure	Reactive
Xylene (All Isomers)	Yes	Yes	Yes	Yes		
Light Aromatic Solvent Naphtha	Yes	Yes		Yes		
1,2,4-Trimethylbenzene	Yes	Yes	Yes	Yes		
Ethylbenzene	Yes	Yes	Yes	Yes		
Cumene	Yes	Yes	Yes	Yes		
Toluene	Yes	Yes	Yes	Yes		

RIGHT TO KNOW

CHEMICAL NAME	STATE CA	CT	FL	IL	LA	NJ	NY	PA	MI	MN	MA	RI	WI
Xylene (All Isomers)						Yes		Yes			Yes	Yes	
Light Aromatic Solvent Naphtha						Yes		Yes					
1,2,4-Trimethylbenzene						Yes		Yes			Yes		
Ethylbenzene						Yes		Yes			Yes		
Cumene						Yes					Yes		
Toluene	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
Toluene	108-88-3		Yes		Yes
Ethylbenzene	100-41-4			Yes	
Cumene	98-82-8			Yes	

CLEAN AIR WATER ACTS		**Clean Air Acts**			**Clean Water Acts**		
CHEMICAL NAME	**CAS #**	**HAP**	**Ozone Class 1**	**Ozone Class 2**	**HS**	**PP**	**TP**
Toluene	108-88-3				Yes	Yes	Yes
Ethylbenzene	100-41-4	Yes			Yes	Yes	Yes
Xylene (All Isomers)	1330-20-7	Yes			Yes		
Cumene	98-82-8				Yes (Oil)	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**
Xylene (All Isomers)	Yes	Yes	Yes	Yes	Yes	Yes
Light Aromatic Solvent Naphtha	Yes	Yes	Yes	Yes	Yes	Yes
1,2,4-Trimethylbenzene	Yes	Yes	Yes	Yes	Yes	Yes
Ethylbenzene	Yes	Yes	Yes	Yes	Yes	Yes
Cumene	Yes	Yes	Yes	Yes	Yes	Yes
Toluene	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