



# SAFETY DATA SHEET

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 &amp; 1272/2008/EC Standards



SDS Revision: 1.2

SDS Revision Date: 12/12/2013

## 1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	<b>ETCHALL® ETCHING CREAM</b>
1.2	Chemical Name:	Ammonium Bifluoride Solution
1.3	Synonyms:	Ammonium Hydrogendifluoride Solution; 3227-CREAM
1.4	Trade Names:	Etchall® Etching Cream
1.5	Product Use:	NA
1.6	Distributor's Name:	B & B Etching Products, Inc.
1.7	Distributor's Address:	PO Box 1415, Sun City, AZ 85372
1.8	Emergency Phone:	<b>INFOTRAC +1 (800) 535-5053 / +1 (352) 323-3500</b>
1.9	Business Phone / Fax:	+1 (623) 933-4567 / +1 (623) 815-9095

## 2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	<p>This product is classified as a hazardous substance and as dangerous goods according to the classification criteria of [NOHSC: 1088 (2004)] and ADG Code (Australia).</p> <p><b>DANGER! TOXIC IF SWALLOWED. CAUSES SEVERE BURNS AND EYE DAMAGE.</b></p> <p><u>Hazard Statements (H):</u> H301 – Toxic if swallowed. H318 – Causes serious eye damage.</p> <p><u>Precautionary Statements (P):</u> P264 – Wash hands and exposed skin surfaces thoroughly with soap and warm water after handling. P270 – Do not eat, drink or smoke while using this product. P280 - Wear protective gloves/clothing and eye/face protection. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P321 – Specific treatment – See section 4 of this Safety Data Sheet. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 – Immediately call a POISON CENTER or doctor/physician. P330 – Rinse mouth. P405 – Store locked up. P501 - Dispose of contents/ container to an approved waste disposal plant.</p>	 
2.2	Effects of Exposure:	<p><u>Ingestion:</u> Harmful if swallowed. May cause burns, which may not be immediately painful or visible. May cause severe burns of mouth, throat and stomach.</p> <p><u>Eyes:</u> Eye irritant. May cause severe or permanent eye damage.</p> <p><u>Skin:</u> Harmful or fatal if swallowed. May be harmful by breathing dusts or mists. Contact may result in blistering or ulcers of skin.</p> <p><u>Inhalation:</u> May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.</p>	
2.3	Symptoms of Overexposure:	<p><u>Eyes:</u> Redness, burning, irritation, and swelling around eyes.</p> <p><u>Skin:</u> Redness, burning, itching, rash, blistering of skin.</p> <p><u>Ingestion:</u> Possible symptoms include nausea, vomiting, and abdominal pain.</p> <p><u>Inhalation:</u> Coughing, wheezing, swelling of throat, irritation in mucous membranes, difficulty breathing.</p>	
2.4	Acute Health Effects:	Harmful or fatal if swallowed. Eye and skin irritant. Harmful if inhaled. Causes severe burns to eyes and skin.	
2.5	Chronic Health Effects:	Exposure may result in damage to bones and ligaments. Chronic exposure may result in bone changes with associated joint stiffness. Could irritate sinuses if exposed for an extended period of time.	
2.6	Target Organs:	Eyes, skin, lungs (corrosive), bones.	

## 3. COMPOSITION & INGREDIENT INFORMATION

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m <sup>3</sup> )									OTHER
					ACGIH		NOHSC			OSHA				
					TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	TLV	STEL	IDLH		
WATER	7332-18-5	ZC0110000	231-791-2	40-70	NE	NE	NF	NF	NF	NE	NE	NE		
AMMONIUM BIFLUORIDE	1341-49-7	BQ9200000	215-676-4	20-40	(2.5)	NA	(2.5)	NF	NF	NA	NA	NA	NIOSH (2.5)	
	Acute Tox. Oral 3; Skin Corr. 1B; Serious Eye Dam. 1; H301, H314													
PROPRIETARY INGREDIENTS	NA	NA	NA	10-30	NA	NA	NF	NF	NF	NA	NA	NA		

NA = Not Available; ND = Not Determined; NE = Not Established; NF = Not Found; C = Ceiling Limit; See Section 16 for Additional Definitions of Terms Used

NOTE: All WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-2010 format.




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## 4. FIRST AID MEASURES

4.1	First Aid:	<p><b>Ingestion:</b> DO NOT INDUCE VOMITING. Contact InfoTrac +1 (800) 535-5053 or the nearest Poison Control Center or local emergency telephone number for assistance and instructions. Seek immediate medical attention. Never give anything by mouth to an unconscious person. Rinse mouth with water. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.</p> <p><b>Eyes:</b> If product gets in the eyes, flush eyes thoroughly with copious amounts of water for at least 15 minutes, holding eyelid(s) open to ensure complete flushing. If the eyes or face become swollen during or following use, consult a physician or emergency room immediately.</p> <p><b>Skin:</b> Remove contaminated clothing and wash affected areas with soap and water. If discomfort persists and/or the skin reaction worsens, contact a physician immediately. Do not wear contaminated clothing until after it has been properly cleaned.</p> <p><b>Inhalation:</b> Remove victim to fresh air at once. Under extreme conditions, if breathing stops, perform artificial respiration. Seek immediate medical attention.</p>															
4.2	Medical Conditions Aggravated by Exposure:	<p>Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin, respiratory system, bones) or impaired kidney function may be more susceptible to the effects of this substance.</p> <table border="1" data-bbox="1055 569 1546 724"> <tr> <td colspan="2"><b>HEALTH</b></td> <td><b>3</b></td> </tr> <tr> <td colspan="2"><b>FLAMMABILITY</b></td> <td><b>0</b></td> </tr> <tr> <td colspan="2"><b>PHYSICAL HAZARDS</b></td> <td><b>2</b></td> </tr> <tr> <td colspan="2"><b>PROTECTIVE EQUIPMENT</b></td> <td><b>B</b></td> </tr> <tr> <td><b>EYES</b></td> <td><b>SKIN</b></td> <td></td> </tr> </table>	<b>HEALTH</b>		<b>3</b>	<b>FLAMMABILITY</b>		<b>0</b>	<b>PHYSICAL HAZARDS</b>		<b>2</b>	<b>PROTECTIVE EQUIPMENT</b>		<b>B</b>	<b>EYES</b>	<b>SKIN</b>	
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## 5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	Non-flammable. May react with metals to release hydrogen gas, which can form explosive mixtures with air. Excessive heat may release toxic corrosive gases.	
5.2	Extinguishing Methods:	Water spray, dry chemical, alcohol foam, or carbon dioxide.	
5.3	Firefighting Procedures:	As with any fire, firefighters should wear appropriate protective equipment including a MSHA/NIOSH approved or equivalent self-contained breathing apparatus (SCBA) and protective clothing. Fight fires as for surrounding materials. Hazardous decomposition products may be released. Thermal degradation may produce oxides of carbon, phosphorous, and/or nitrogen, hydrogen fluoride, hydrocarbons and/or derivatives. Fire should be fought from a safe distance. Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personal. Fight fire upwind. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway.	

## 6. ACCIDENTAL RELEASE MEASURES

6.1	Spills:	<p>Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment (PPE). Use safety glasses or safety goggles and face shield; use gloves and other protective clothing (e.g., apron, boots, etc.) to prevent skin contact. Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.</p> <p><b>Small Spills:</b> Wear appropriate protective equipment including gloves and protective eyewear. Use a non-combustible, inert material such as vermiculite or sand to soak up the product and place into a container for later disposal. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.</p> <p><b>Large Spills:</b> Keep incompatible materials (e.g., powdered metals) away from spill. Stay upwind and away from spill or release. Isolate immediate hazard area and keep unauthorized personnel out of area. Stop spill or release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant. Recover as much free liquid as possible and collect in acid-resistant container. Use absorbent to pick up residue. Avoid discharging liquid directly into a sewer or surface waters.</p>
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## 7. HANDLING & STORAGE INFORMATION




7.1	Work & Hygiene Practices:	Avoid breathing mists or spray. Avoid eye and skin contact. Wear protective equipment when handling product. Keep out of the reach of children. Do not eat, drink or smoke when handling this product. Wash thoroughly after handling. Do not expose to heat and flame. Use only in ventilated areas. Keep out of the reach of children. Immediately clean-up and decontaminate any spills or residues.
7.2	Storage & Handling:	Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans) away from heat and direct sunlight. Store in acid-resistant containers. Keep containers covered when not in use. Keep away from incompatible substances (see Section 10). Protect containers from physical damage.
7.3	Special Precautions:	Empty containers may retain hazardous product residues. Store only in plastic containers such as polyethylene, polypropylene or polyvinyl chloride at temperatures between 65-85 °F (18-30°C). Crystals will form in product at temperatures below 65 °F (18 °C), but will dissolve when product temperature is raised above 65 °F (18 °C)



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## 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1	Ventilation & Engineering Controls:	Use local or general exhaust ventilation to effectively remove and prevent buildup of vapors or mist generated from the handling of this product. Ensure appropriate decontamination equipment is available (e.g., sink, safety shower, eye-wash station).	
8.2	Respiratory Protection:	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).	
8.3	Eye Protection:	Safety glasses with side shields must be used when handling or using this product. A protective face shield is also recommended. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).	
8.4	Hand Protection:	Wear protective, chemical-resistant gloves (e.g., neoprene) when using or handling this product. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wash and dry hands.	
8.5	Body Protection:	A chemical resistant apron and/or protective clothing are recommended when handling or using this product. For splash or full contact, a nitrile rubber apron/protective clothing (0.11 mm thickness min.) is recommended.	

## 9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Off-white to tan semi-viscous liquid
9.2	Odor:	Mild, ammonia-like odor
9.3	Odor Threshold:	NA
9.4	pH:	2.0-3.0
9.5	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	> 99 °C (> 210 °F)
9.7	Flashpoint:	NA
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	Same as water
9.10	Vapor Density:	NA
9.11	Relative Density:	1.43
9.12	Solubility:	Most insoluble (water)
9.13	Partition Coefficient (log P <sub>ow</sub> ):	NA
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	NA
9.17	Other Information:	Evaporation Rate: NA

## 10. STABILITY & REACTIVITY

10.1	Stability:	Stable.
10.2	Hazardous Decomposition Products:	Contact with metals such as aluminum and zinc may produce hydrogen gas. Thermal decomposition may produce phosphoric, nitrogen, carbon or sulfur oxides.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Incompatible substances.
10.5	Incompatible Substances:	Cyanides, water-reactive substances, chlorinated cleaners or sanitizers, metals such as aluminum, zinc and magnesium. May generate heat or form flammable gases when mixed with a wide variety of substances.

## 11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation: YES	Absorption: YES	Ingestion: YES
11.2	Toxicity Data:	NA		
11.3	Acute Toxicity:	See Section 2.4		
11.4	Chronic Toxicity:	See Section 2.5		
11.5	Suspected Carcinogen:	NA		
11.6	Reproductive Toxicity:	This product is not reported to cause reproductive toxicity in humans.		
	Mutagenicity:	This product is not reported to produce mutagenic effects in humans.		
	Embryotoxicity:	This product is not reported to produce embryotoxic effects in humans.		
	Teratogenicity:	This product is not reported to cause teratogenic effects in humans.		
	Reproductive Toxicity:	This product is not reported to cause reproductive effects in humans.		
11.7	Irritancy of Product:	See Section 2.3		
11.8	Biological Exposure Indices:	NE		
11.9	Physician Recommendations:	Treat symptomatically.		



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## 12. ECOLOGICAL INFORMATION

12.1	Environmental Stability:	No data available.
12.2	Effects on Plants & Animals:	No data available.
12.3	Effects on Aquatic Life:	No data available.





## 13. DISPOSAL CONSIDERATIONS

13.1	Waste Disposal:	Review current local, state and federal laws, codes, statutes and regulations to determine current status and appropriate disposal method for the ingredients listed in Section 2. Any disposal practice must be in compliance with local, state, and federal laws and regulations. Contact the appropriate agency for specific information. Treatment, transport, storage and disposal of hazardous waste must be provided by a licensed facility or waste hauler.
13.2	Special Considerations:	U.S. EPA Hazardous Waste – Characteristic - Corrosive (D002)

## 14. TRANSPORTATION INFORMATION

14.1	49 CFR (GND):	UN2817, AMMONIUM HYDROGENDIFLUORIDE SOLUTION, 8, II LTD QTY: IP VOL < 1.0 L, PKG ≤ 30.0 kg	
14.2	IATA (AIR):	UN2817, AMMONIUM HYDROGENDIFLUORIDE SOLUTION, 8, II	
14.3	IMDG (OCN):	UN2817, AMMONIUM HYDROGENDIFLUORIDE SOLUTION, 8, II LTD QTY: IP VOL < 1.0 L, PKG ≤ 30.0 kg	
14.4	TDGR (Canadian GND):	UN2817, AMMONIUM HYDROGENDIFLUORIDE SOLUTION, 8, II LTD QTY: IP VOL < 1.0 L, PKG ≤ 30.0 kg	
14.5	ADR/RID (EU):	UN2817, AMMONIUM HYDROGENDIFLUORIDE SOLUTION, 8, II LTD QTY: IP VOL < 1.0 L, PKG ≤ 30.0 kg	
14.6	SCT (MEXICO):	UN2817, DIHIDROFLORURO AMONICO EN SOLUCION, 8, II CANTIDAD LIMITADA: IP VOL < 1.0 L, PKG ≤ 30.0 kg	
14.7	ADGR (AUS):	UN2817, AMMONIUM HYDROGENDIFLUORIDE SOLUTION, 8, II LTD QTY: IP VOL < 1.0 L, PKG ≤ 30.0 kg	

## 15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimis) reporting levels established by SARA Title III, Section 313.
15.2	SARA Threshold Planning Quantity:	NA
15.3	TSCA Inventory Status:	The components of this product are listed on the TSCA Inventory.
15.4	CERCLA Reportable Quantity (RQ):	Ammonium Bifluoride: 100 lbs (45.4 kg).
15.5	Other Federal Requirements:	NA
15.6	Other Canadian Regulations:	This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. WHMIS Class D1, E (Toxic, corrosive material).  
15.7	State Regulatory Information:	<u>Ammonium Bifluoride</u> is found on the following state criteria lists: Massachusetts Hazardous Substances List (MA), and Pennsylvania Right-to-Know List (PA). No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI).
15.8	Other Requirements:	The primary components of this product are listed in Annex I of EU Directive 67/548/EEC. <u>Ammonium Bifluoride</u> : Toxic, Corrosive (T, C). <u>Risk Phrases</u> (R): R25-34 – Toxic if swallowed. Causes burns. <u>Safety Phrases</u> (S): S(1/2)-22-26-37-45 - Keep locked up and out of the reach of children. Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves. If case of accident, or if you feel unwell, seek medical advice immediately (show the label where possible).  





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## 16. OTHER INFORMATION

16.1	Other Information:	<b>DANGER! TOXIC IF SWALLOWED. CAUSES SEVER BURNS AND EYE DAMAGE.</b> Wash hands and exposed skin surfaces thoroughly with soap and warm water after handling. Do not eat, drink or smoke while using this product. Wear protective gloves/clothing and eye/face protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse mouth. Store locked up. <b>KEEP OUT OF REACH OF CHILDREN.</b>	
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.	
16.3	Disclaimer:	This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & b & b Etchall's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.	
16.4	Prepared for:	<b>B &amp; B Etching Products, Inc.</b> PO Box 1415 Sun City, AZ 85372 Tel: +1 (623) 933-4567 Fax: +1 (623) 815-9095 <a href="http://www.etchall.com">http://www.etchall.com</a>	
16.5	Prepared by:	<b>ShipMate, Inc.</b> P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 <a href="http://www.shipmate.com">http://www.shipmate.com</a>	 <i>Dangerous Goods Training &amp; Consulting</i>



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## DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

### GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number
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### EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists
TLV	Threshold Limit Value
OSHA	U.S. Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
IDLH	Immediately Dangerous to Life and Health

### FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.
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### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

### HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard

<b>HEALTH</b>
<b>FLAMMABILITY</b>
<b>PHYSICAL HAZARDS</b>
<b>PERSONAL PROTECTION</b>

### PERSONAL PROTECTION RATINGS:

A	
B	
C	
D	
E	
F	

G	
H	
I	
J	
K	
X	Consult your supervisor or SOPs for special handling directions.

Safety Glasses	Splash Goggles	Face Shield & Protective Eyewear	Gloves
Boots	Synthetic Apron	Protective Clothing & Full Suit	Dust Respirator
Full Face Respirator	Dust & Vapor Half-Mask Respirator	Full Face Respirator	Airline Hood/Mask or SCBA

### OTHER STANDARD ABBREVIATIONS:

NA	Not Available
NR	No Results
NE	Not Established
ND	Not Determined
ML	Maximum Limit
SCBA	Self-Contained Breathing Apparatus

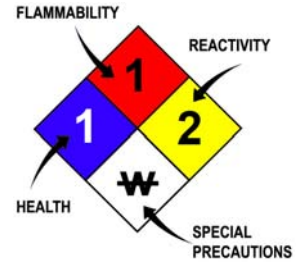
### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

### FLAMMABILITY LIMITS IN AIR:

Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source

### HAZARD RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard
ACD	Acidic
ALK	Alkaline
COR	Corrosive
W	Use No Water
OX	Oxidizer
TREFOIL	Radioactive



### TOXICOLOGICAL INFORMATION:

LD <sub>50</sub>	Lethal Dose (solids & liquids) which kills 50% of the exposed animals
LC <sub>50</sub>	Lethal concentration (gases) which kills 50% of the exposed animal
ppm	Concentration expressed in parts of material per million parts
TD <sub>01</sub>	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD <sub>01</sub> , LD <sub>01</sub> , & LD <sub>02</sub> or TC <sub>1</sub> , TC <sub>01</sub> , LC <sub>01</sub> , & LC <sub>02</sub>	Lowest dose (or concentration) to cause lethal or toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TL <sub>m</sub>	Median threshold limit
log K <sub>ow</sub> or log K <sub>oc</sub>	Coefficient of Oil/Water Distribution

### REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System
DOT	U.S. Department of Transportation
TC	Transport Canada
EPA	U.S. Environmental Protection Agency
DSL	Canadian Domestic Substance List
NDSL	Canadian Non-Domestic Substance List
PSL	Canadian Priority Substances List
TSCA	U.S. Toxic Substance Control Act
EU	European Union (European Union Directive 67/548/EEC)
WGK	Wassergefährdungsklassen (German Water Hazard Class)

### WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

### EC (67/548/EEC) INFORMATION:

C	E	F	N	O	T	Xi	Xn
Corrosive	Explosive	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful

### CLP/GHS (1272/2008/EC) PICTOGRAMS:

GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environment