

## 1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	
1.2	Chemical Name:	See ingredients listed in section 3
1.3	Synonyms:	523W
1.4	Trade Names:	
1.5	Product Use:	Air Filter Cleaner
1.6	Distributor's Name:	Walker Engineering, Inc.
1.7	Distributor's Address:	9255 San Fernando Road, Sun Valley CA 91352 USA
1.8	Emergency Phone:	<b>CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300</b>
1.9	Business Phone / Fax:	+1 (818) 252-7788 / +1 (818) 252-7785

## 2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	<p>This product is classified as a <b>HAZARDOUS SUBSTANCE</b> but not as <b>DANGEROUS GOODS</b> according to the classification criteria of NOHSC:1088 (2004) and ADG Code (Australia).  <b>DANGER! CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. MAY CAUSE RESPIRATORY IRRITATION. HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS.</b>  <u>Classification:</u> Skin Corr. 1B; STOT SE 3; Aquatic Chronic 3  <u>Hazard Statements (H):</u> H314 – Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H412 – Harmful to aquatic life with long lasting effects.  <u>Precautionary Statements (P):</u> P261 – Avoid breathing dust/fume/mist/vapors/spray. P264 – Wash hands and exposed skin areas with soap and water thoroughly after handling. P271 – Use only outdoors or in a well-ventilated area. P273 – Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P363 – Wash contaminated clothing before reuse. P304+P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 – If eye irritation persists: Get medical advice/attention. P405 – Store locked up. P501 - Dispose of contents/container in accordance with local regulations.</p>	
-----	------------------------	---	---

## 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				
					ppm		ppm			ppm				
					TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH		
BUTOXYETHANOL	111-76-2	KJ8575000	203-905-0	NA	50	75	96.9	50	242	50	NA	240	SKIN	
Acute Tox. 4 *; Eye Irrit. 2; Skin Irrit. 2; H332, H312, H302, H319, H315														
SODIUM METASILICATE PENTAHYDRATE	6834-92-0	VV9275000	229-912-9	NA	10	NA	NF	NF	NF	15	NA	NA		
Acute Tox. 4; Skin Corr. 1B; Serious Eye Dam. 1; STOT SE 3; H302, H314, H335														
OCTYLPHENOXYPOLYETHOXYETHYLPHOSPHATE	52623-95-7	NA	NA	NA	NA	NA	NF	NF	NF	NA	NA	NA		
Skin Corr. 1B; Aquatic Chronic 3; H314, H412														
SODIUM HYPOCHLORITE	7681-52-9	NA	231-668-3	NA	NA	NA	NF	NF	NF	NA	NA	NA		
Skin Corr. 1B; Aquatic Acute 1; H314, H400														

## 4. FIRST AID MEASURES

4.1	First Aid:	<p><u>Ingestion:</u> DO NOT INDUCE VOMITING. Contact ChemTrec +1 (800) 424-9300 or the nearest Poison Control Center or local emergency telephone number for assistance and instructions. Seek immediate medical attention. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.</p> <p><u>Eyes:</u> 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><u>Skin:</u> 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><u>Inhalation:</u> Remove victim to fresh air at once. Under extreme conditions, if breathing stops, perform artificial respiration. Seek immediate medical attention.</p>
-----	------------	---

## 4. FIRST AID MEASURES – cont'd

4.2	Effects of Exposure:	<p><b>Ingestion:</b> Severe burns of mouth, throat and stomach. Symptoms may include vomiting, diarrhea, and abdominal pain.</p> <p><b>Eyes:</b> Severe irritation, burns, eye damage. Corrosive.</p> <p><b>Skin:</b> Severe irritation, and possible burns.</p> <p><b>Inhalation:</b> Severe irritation of respiratory tract and mucous membranes; coughing, difficulty breathing</p>											
4.3	Symptoms of Overexposure:	<p><b>Ingestion:</b> Nausea, vomiting, severe abdominal pain.</p> <p><b>Eyes:</b> Redness, burning, irritation, and swelling around eyes. Eye damaged</p> <p><b>Skin:</b> Redness, burning, itching, rash, and scaling of the skin (dermatitis).</p> <p><b>Inhalation:</b> Coughing, wheezing, swelling of throat, irritation in mucous membranes, difficulty breathing.</p>											
4.4	Acute Health Effects:	Severe or permanent eye damage. Severe irritation and possible burns. Severe burns of mouth, throat and stomach. Severe irritation of respiratory tract and mucous membranes.											
4.5	Chronic Health Effects:	Severe or permanent eye damage.											
4.6	Target Organs:	Eyes, Skin & Respiratory System.											
4.7	Medical Conditions Aggravated by Exposure:	Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin, and respiratory system). Preclude from exposure those individuals that are susceptible to dermatitis, asthma or bronchitis.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #0000FF; color: white;"><b>HEALTH</b></td> <td style="text-align: center;"><b>2</b></td> </tr> <tr> <td style="background-color: #FF0000; color: white;"><b>FLAMMABILITY</b></td> <td style="text-align: center;"><b>0</b></td> </tr> <tr> <td style="background-color: #FFA500; color: white;"><b>PHYSICAL HAZARDS</b></td> <td style="text-align: center;"><b>0</b></td> </tr> <tr> <td colspan="2" style="background-color: #000000; color: white;"><b>PROTECTIVE EQUIPMENT</b></td> </tr> <tr> <td style="background-color: #000000; color: white;"><b>EYES</b></td> <td style="background-color: #000000; color: white;"><b>SKIN</b></td> </tr> </table>	<b>HEALTH</b>	<b>2</b>	<b>FLAMMABILITY</b>	<b>0</b>	<b>PHYSICAL HAZARDS</b>	<b>0</b>	<b>PROTECTIVE EQUIPMENT</b>		<b>EYES</b>	<b>SKIN</b>
<b>HEALTH</b>	<b>2</b>												
<b>FLAMMABILITY</b>	<b>0</b>												
<b>PHYSICAL HAZARDS</b>	<b>0</b>												
<b>PROTECTIVE EQUIPMENT</b>													
<b>EYES</b>	<b>SKIN</b>												

## 5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	This material can burn but will not readily ignite. This material will release vapors (toxic fumes of sodium oxide) when heated above the flash point temperature that can ignite when exposed to a source of ignition. Toxic fumes of sodium oxide.	
5.2	Extinguishing Methods:	Dry Chemical, Foam, Carbon Dioxide, and Water Fog.	
5.3	Firefighting Procedures:	Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personal. Avoid spraying water directly into storage containers because of danger of boil over. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.	

## 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. <b>CAUTION – may be slippery if spilled.</b></p> <p>For <u>small spills</u> (e.g., &lt; 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows) and secure all sources of ignition. Remove spilled material with absorbent material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse.</p> <p>For <u>large spills</u> (e.g., ≥ 1 gallon (3.8 L)), deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g., sand or earth). Use ONLY non-sparking tools for recovery and cleanup. Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for proper disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.</p>	
-----	---------	--	--

## 7. HANDLING & STORAGE INFORMATION

7.1	Work & Hygiene Practices:	Use normal hygiene practices. Avoid direct skin contact. Wash hands thoroughly after using this product and before eating, drinking, or smoking. Good personal hygiene practices, such as washing any skin contact areas and removing contaminated clothing, are recommended.	
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. Keep away from incompatible substances (see Section 10). Protect containers from physical damage. Do not freeze (< 32 °F), or heat (110 °F).	
7.3	Special Precautions:	Follow all instructions on product label. Keep container closed when not in use. Keep this and all chemicals out of reach of children.	

## 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1	Exposure Limits: ppm (mg/m <sup>3</sup> )	ACGIH		NOHSC			OSHA			OTHER
		TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH	
		BUTOXYETHANOL	50	75	96.9	50	242	50	NA	240

SODIUM METASILICATE PENTAHYDRATE	10	NA	NF	NF	NF	15	NA	NA	
----------------------------------	----	----	----	----	----	----	----	----	--

## 8. EXPOSURE CONTROLS & PERSONAL PROTECTION – cont'd

8.2	Ventilation & Engineering Controls:	Not required under normal conditions of use. Use with adequate ventilation (e.g., open doors and windows, local exhaust ventilation).	
8.3	Respiratory Protection:	Not required under normal conditions of use. In instances where vapors or sprays of this product are generated, and respiratory protection is needed, use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or Australia.	
8.4	Eye Protection:	Avoid eye contact. Protective eyewear that conforms to ANSI Z87.1 (or other applicable and appropriate standards) should be used when handling any chemical product.	
8.5	Hand Protection:	Use gloves constructed of chemical resistant materials such as neoprene or heavy nitrile rubber if frequent or prolonged contact is expected.	
8.6	Body Protection:	Not required under normal conditions of use. Use appropriate protective equipment (e.g., apron) as necessary to prevent or reduce exposure if frequent or prolonged contact is expected.	

## 9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Yellow liquid
9.2	Odor:	Slight butyl odor
9.3	Odor Threshold:	NA
9.4	pH:	14
9.5	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	> 100 °C (212 °F)
9.7	Flashpoint:	NE
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	NA
9.11	Relative Density:	~8.69 lbs/gal.
9.12	Solubility:	Soluble
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:	VOC: < 4.000 G/L

## 10. STABILITY & REACTIVITY

10.1	Stability:	Stable under normal conditions of use.
10.2	Hazardous Decomposition Products:	None known.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Strong oxidizers and reducing agents.
10.5	Incompatible Substances:	Strong oxidizing agents, strong acids and bases.

## 11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation: NO	Absorption: YES	Ingestion: YES
11.2	Toxicity Data:	This product has NOT been tested on animals to obtain toxicology data. Toxicology data, found in scientific literature, is available for some of the components of the product but is not presented below.		
11.3	Acute Toxicity:	See section 4.4		
11.4	Chronic Toxicity:	See section 4.5		
11.5	Suspected Carcinogen:	Butoxyethanol: IARC Group 3		
11.6	Reproductive Toxicity:	This product is not reported to produce 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 produce teratogenic effects in humans.		
	Reproductive Toxicity:	This product is not reported to produce reproductive effects in humans.		
11.7	Irritancy of Product:	See section 4.3		
11.8	Biological Exposure Indices:	NE		
11.9	Physician Recommendations:	Treat symptomatically.		

## 12. ECOLOGICAL INFORMATION

12.1	Environmental Stability:	There are no specific data available for this product.
12.2	Effects on Plants & Animals:	There are no specific data available for this product.
12.3	Effects on Aquatic Life:	There are no specific data available for this product; however, very large releases of this product may be harmful or fatal to overexposed aquatic life.

## 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.
13.2	Special Considerations:	NA

## 14. TRANSPORTATION INFORMATION

The basic information (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.

14.1	49 CFR (GND):	NOT REGULATED
14.2	IATA (AIR):	NOT REGULATED
14.3	IMDG (OCN):	NOT REGULATED
14.4	TDGR (Canadian GND):	NOT REGULATED
14.5	ADR/RID (EU):	NOT REGULATED
14.6	SCT (MEXICO):	NOT REGULATED
14.7	ADGR (AUS):	NOT REGULATED

## 15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product contains <u>Butoxyethanol</u> , a substance subject to SARA Title III, section 313 reporting requirements.
15.2	SARA Threshold Planning Quantity:	There are no specific Threshold Planning Quantities for the components of this product.
15.3	TSCA Inventory Status:	The components of this product are listed on the TSCA Inventory.
15.4	CERCLA Reportable Quantity (RQ):	<u>Sodium Hypochlorite</u> : 45 kg (100 lbs.)
15.5	Other Federal Requirements:	This material does not contain any hazardous air pollutants. None of the components in this product are listed as priority pollutants under the CWA. None of the components in this product are listed as toxic pollutants under the CWA.
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 E (Corrosive Material), Class D2B (Materials Causing Other Toxic Effects). 
15.7	State Regulatory Information:	<u>Butoxyethanol</u> is found on the following state criteria list: 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), Pennsylvania Right-to-Know List (PA) and Washington Permissible Exposures List (WA). <u>Sodium Metasilicate</u> is found on the following state criteria lists: NJ and PA. <u>Sodium Hypochlorite</u> is found on the following state criteria list: MA, MN and 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 not listed in Annex I of EU Directive 67/548/EEC: <u>Sodium Metasilicate</u> : Corrosive(C). <u>Risk Phrases</u> (R): 34-37 – Causes burns. Irritation to respiratory system. <u>Safety Phrases</u> (S): (1/2)-13-24/25-36/37/39-45 – Keep locked up and out of reach of children. Keep away from food drink and animal foodstuffs. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell seek medical advice immediately (show label where possible). <u>Sodium Hypochlorite</u> : Corrosive(C); Environmental Danger (N). <u>Risk Phrases</u> (R): 31-34-50 – Contact with acids liberates toxic gas. Causes burns. Very toxic to aquatic organisms. <u>Safety Phrases</u> (S): (1/2)-28-45-50-61 – Keep locked up and out of reach of children. After contact with skin wash immediately with plenty of water. In case of accident or if you feel unwell seek medical advice immediately (show the label where possible). Do not mix with acids. Avoid release to the environment. Refer to special instructions/safety data sheet. 

## 16. OTHER INFORMATION

16.1	Other Information:	<p><b>DANGER! CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. MAY CAUSE RESPIRATORY IRRITATION. HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS.</b> Use only as directed. Avoid breathing dust/fume/mist/vapors/spray. Wash hands and exposed skin areas with soap and water thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Keep container tightly closed. Store locked up. <b>KEEP OUT OF REACH OF CHILDREN.</b></p>	
16.2	Terms & Definitions:	See next page of this Safety Data Sheet.	
16.3	Disclaimer:	<p>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 &amp; Walker Engineering Enterprises Inc.'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.</p>	
16.4	Prepared for:	<p><b>Walker Engineering Enterprises Inc.</b>                  9255 San Fernando Road                  Sun Valley, CA 91352 USA                  Tel: +1 (818) 252-7788                  Fax: +1 (818) 252-7785  <a href="http://www.walkerairsep.com/">http://www.walkerairsep.com/</a></p>	
16.5	Prepared by:	<p><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></p>	

## 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:

<b>CAS No.</b>	Chemical Abstract Service Number
----------------	----------------------------------

### EXPOSURE LIMITS IN AIR:

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

### FIRST AID MEASURES:

<b>CPR</b>	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.
------------	--

### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

### HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

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

HEALTH
FLAMMABILITY
PHYSICAL HAZARDS
PERSONAL PROTECTION

### PERSONAL PROTECTION RATINGS:

<b>A</b>	
<b>B</b>	
<b>C</b>	
<b>D</b>	
<b>E</b>	
<b>F</b>	

<b>G</b>	
<b>H</b>	
<b>I</b>	
<b>J</b>	
<b>K</b>	
<b>X</b>	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:

<b>ML</b>	Maximum Limit
<b>NA</b>	Not Available
<b>ND</b>	Not Determined
<b>NE</b>	Not Established
<b>NF</b>	Not Found
<b>NR</b>	No Results
<b>SCBA</b>	Self-Contained Breathing Apparatus

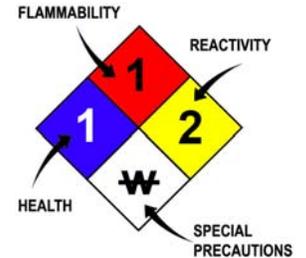
### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

### FLAMMABILITY LIMITS IN AIR:

<b>Autoignition Temperature</b>	Minimum temperature required to initiate combustion in air with no other source of ignition
<b>LEL</b>	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
<b>UEL</b>	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
<b>ACD</b>	Acidic
<b>ALK</b>	Alkaline
<b>COR</b>	Corrosive
<b>W</b>	Use No Water
<b>OX</b>	Oxidizer
<b>TREFOIL</b>	Radioactive



### TOXICOLOGICAL INFORMATION:

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

### REGULATORY INFORMATION:

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