



# SAFETY DATA SHEET

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

SDS Revision: 1.0

SDS Revision Date: 3/13/2014

## 1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	<b>K&amp;N CABIN AIR FILTER CLEANER KIT</b>
1.2	Chemical Name:	Glycol Ether DB Solution
1.3	Synonyms:	NA
1.4	Trade Names:	K&N Cabin Air Filter Cleaner Kit
1.5	Product Use:	Air Filter Cleaning
1.6	Distributor's Name:	K & N Engineering, Inc.
1.7	Distributor's Address:	P.O. Box 1329, Riverside, CA 92502-1329 USA
1.8	Emergency Phone:	<b>CHEMTREC +1 (800) 424-9300 / +1 (703) 527-3887 (CCN 632715)</b> – see also last 2 pages
1.9	Business Phone / Fax:	+1 (800) 858-3333 / +1 (951) 826-4001

## 2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	<p>This product is classified as a hazardous substance but not as dangerous goods according to the classification criteria of [NOHSC: 1088 (2004)] and ADG Code (Australia).</p> <p><b>WARNING! HARMFUL IF SWALLOWED. CAUSES SERIOUS EYE IRRITATION.</b></p> <p><u>Hazard Statements (H):</u> H302 – Harmful if swallowed. H319 – Causes serious eye irritation.</p> <p><u>Precautionary Statements (P):</u> P273 – Avoid release to the environment. P280 – Wear protective gloves/eye protection/face protection. P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 – Dispose of contents/ container to an approved waste disposal plant.</p>	
2.2	Effects of Exposure:	<p><u>Eyes:</u> This product can cause transient mild to moderate eye irritation with short-term contact with liquid sprays or mists.</p> <p><u>Skin:</u> This product can cause mild to moderate, transient skin irritation with short-term exposure.</p> <p><u>Ingestion:</u> If swallowed, no significant adverse health effects are anticipated. Ingestion can cause a laxative effect. If aspirated into the lungs, liquid can cause severe lung damage or death.</p> <p><u>Inhalation:</u> No significant adverse health effects are expected to occur upon short-term exposure to this product. Aspiration of liquid into the lungs can cause severe lung damage or death.</p>	
2.3	Symptoms of Overexposure:	<p><u>Eyes:</u> Irritation, redness, and watering.</p> <p><u>Skin:</u> Possible irritation, defatting, or dermatitis (rash), characterized by dry, scaling, red, itching skin.</p> <p><u>Ingestion:</u> Laxative effects. Gastrointestinal discomfort, nausea and headache.</p> <p><u>Inhalation:</u> May cause irritation to the upper respiratory system. Overexposure to sprays or mists may cause chemical pneumonitis.</p>	
2.4	Acute Health Effects:	<p><u>Eyes:</u> Slightly irritating, but will not permanently injure eye tissue.</p> <p><u>Skin:</u> Low toxicity. Frequent or prolonged contact may be irritating to the skin at the site of contact.</p> <p><u>Ingestion:</u> Mild toxicity. Laxative effects. Gastrointestinal discomfort, nausea and headache.</p> <p><u>Inhalation:</u> Negligible. At elevated temperatures or through mechanical action, may form vapors, mists or fumes that may be irritating to the eyes, nose, throat and lungs.</p>	
2.5	Chronic Health Effects:	Prolonged or repeated skin contact can cause mild irritation and inflammation characterized by drying, cracking, or dermatitis.	
2.6	Target Organs:	Eyes, skin.	

## 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	ppm	ppm	ppm	TLV	STEL	IDLH		
WATER	7732-18-5	ZC0110000	231-791-2	60-100	NE	NE	NF	NF	NF	NE	NE	NE		
GLYCOL ETHER DB	112-34-5	KJ9100000	203-961-6	1-5	NA	NA	NF	NF	NF	NA	NA	NA		
LAURYL DIMETHYLAMINE OXIDE	1643-20-5	JR6650000	216-700-6	1-5	NA	NA	NF	NF	NF	NA	NA	NA		
PROPRIETARY ADDITIVES	NA	NA	NA	1-5	NA	NA	NF	NF	NF	NA	NA	NA		
SODIUM METASILICATE	6834-92-0	VV9275000	229-912-9	0.1-1	2	4	2	NF	NF	2	NA	25		
Acute Tox. - Oral 4; Skin Corr. 1B; Serious Eye Dam. 1; STOT-SE 3; H302, H314, H335														

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 ChemTrec at +1 (800) 424-9300 or +1 (703) 527-3887 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><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).</p> <table border="1" data-bbox="1055 573 1546 728"> <tr> <td colspan="2"><b>HEALTH</b></td> <td><b>2</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>0</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>2</b>	<b>FLAMMABILITY</b>		<b>0</b>	<b>PHYSICAL HAZARDS</b>		<b>0</b>	<b>PROTECTIVE EQUIPMENT</b>		<b>B</b>	<b>EYES</b>	<b>SKIN</b>	
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<b>EYES</b>	<b>SKIN</b>																

## 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.	
5.2	Extinguishing Methods:	Use fire-extinguishing media appropriate for surrounding materials.	
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 and silicon. 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.</p> <p><b>Small Spills:</b> (e.g., ≤ 1.0 gallon (3.8 L)) - 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.</p> <p><b>Large Spills:</b> (e.g., &gt; 1.0 gallon (3.8 L)) - Keep incompatible materials (e.g., organics such as oil) 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. Avoid temperatures above 40°C (120°F). Keep away from incompatible substances (see Section 10). Protect containers from physical damage.
7.3	Special Precautions:	Empty containers may retain hazardous product residues.





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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:	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.	
8.3	Eye Protection:	Safety glasses with side shields must be used when handling or using this product. A protective face shield is also recommended.	
8.4	Hand Protection:	Wear protective, chemical-resistant gloves (e.g., neoprene) when using or handling this product.	
8.5	Body Protection:	A chemical resistant apron and/or protective clothing are also recommended when handling or using this product.	

## 9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Colorless liquid
9.2	Odor:	Solvent Odor
9.3	Odor Threshold:	NA
9.4	pH:	11.0-12.4
9.5	Melting Point/Freezing Point:	≤ 0 °C (32 °F)
9.6	Initial Boiling Point/Boiling Range:	≥ 100 °C (212 °F)
9.7	Flashpoint:	NA
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	NA
9.11	Relative Density:	1.005 g/mL
9.12	Solubility:	Soluble in water
9.13	Partition Coefficient (log P <sub>ow</sub> ):	<u>Glycol Ether DB</u> : log P <sub>ow</sub> : 1 @ 20 °C (68 °F)
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	NA
9.17	Other Information:	NA

## 10. STABILITY & REACTIVITY

10.1	Stability:	Stable at normal temperatures.
10.2	Hazardous Decomposition Products:	Fumes, smoke, carbon monoxide, silicon oxides.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Open flames, sparks, high heat, and close proximity to incompatible substances.
10.5	Incompatible Substances:	Strong acids, oxidizers and some metals (e.g., lead, tin/tin oxides, zinc, aluminum).

## 11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation: NO	Absorption: YES	Ingestion: YES
11.2	Toxicity Data:	Data from scientific literature is shown below: <u>Glycol Ether DB</u> : LD <sub>50</sub> (oral, rat) = 7,291 mg/kg; <u>Lauryl Dimethylamine Oxide</u> : LD <sub>50</sub> (oral, mouse) = 2,700 mg/kg		
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:	Do not let product enter drains.



## 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:	NA

## 14. TRANSPORTATION INFORMATION

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 does not contain any substances subject to SARA Title III, section 313 reporting requirements.	
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):	NA	
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 D2B (Materials Causing Other Toxic Effects).	
15.7	State Regulatory Information:	<u>Sodium Metasilicate</u> is found on the following state criteria lists: Massachusetts Hazardous Substances List (MA), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), 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>Glycol Ether DB</u> : Irritant (Xi). <u>Risk Phrases (R)</u> : R36 – Irritating to eyes. <u>Safety Phrases (S)</u> : S2-13-24/25-26-36/39 - Keep out of reach of children. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately. Wear suitable gloves and eye/face protection. <u>HazChem Code</u> : None allocated. <u>Poisons Schedule</u> : None allocated	





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## 16. OTHER INFORMATION

16.1	Other Information:	<b>WARNING! HARMFUL IF SWALLOWED. CAUSES SERIOUS EYE IRRITATION.</b> Avoid contact with eyes and skin. Wear protective gloves/eye 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. Wear suitable eye protection and gloves. Keep locked up and away from food or drinks. <b>KEEP OUT OF REACH OF CHILDREN.</b>	
16.2	Terms & Definitions:	See next to last 2 pages 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 & K & Engineering, Inc.'s knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are 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>K &amp; N Engineering, Inc.</b> P.O. Box 1329 Riverside, CA 92502-1329 USA Tel: +1 (800) 858-3333 Fax: +1 (951) 826-4001 E-Mail: tech@knfilters.com <a href="http://www.knfilters.com">http://www.knfilters.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>	

## 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
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### EXPOSURE LIMITS IN AIR:

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

### 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.
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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:

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

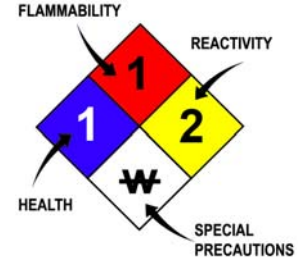
### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

### 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:

<b>0</b>	Minimal Hazard
<b>1</b>	Slight Hazard
<b>2</b>	Moderate Hazard
<b>3</b>	Severe Hazard
<b>4</b>	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>02</sub> or TC, TC<sub>01</sub>, LC<sub>01</sub>, &amp; LC<sub>02</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





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## 1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	<b>K&amp;N CABIN AIR FILTER REFRESHER KIT</b>
1.2	Chemical Name:	Glycol Ether DB Solution
1.3	Synonyms:	NA
1.4	Trade Names:	K&N Cabin Air Filter Refresher Kit
1.5	Product Use:	Air Filter Cleaning
1.6	Distributor's Name:	K & N Engineering, Inc.
1.7	Distributor's Address:	P.O. Box 1329, Riverside, CA 92502-1329 USA
1.8	Emergency Phone:	<b>CHEMTREC +1 (800) 424-9300 / +1 (703) 527-3887 (CCN 632715) – see also last 2 pages</b>
1.9	Business Phone / Fax:	+1 (800) 858-3333 / +1 (951) 826-4001

## 2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	<p>This product is classified as a hazardous substance but not as dangerous goods according to the classification criteria of [NOHSC: 1088 (2004)] and ADG Code (Australia).</p> <p><b>WARNING! HARMFUL IF SWALLOWED. CAUSES SERIOUS EYE IRRITATION.</b></p> <p><u>Hazard Statements (H):</u> H302 – Harmful if swallowed. H319 – Causes serious eye irritation.</p> <p><u>Precautionary Statements (P):</u> P273 – Avoid release to the environment. P280 – Wear protective gloves/eye protection/face protection. P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 – Dispose of contents/ container to an approved waste disposal plant.</p>	
2.2	Effects of Exposure:	<p><u>Eyes:</u> This product can cause transient mild to moderate eye irritation with short-term contact with liquid sprays or mists.</p> <p><u>Skin:</u> This product can cause mild to moderate, transient skin irritation with short-term exposure.</p> <p><u>Ingestion:</u> If swallowed, no significant adverse health effects are anticipated. Ingestion can cause a laxative effect. If aspirated into the lungs, liquid can cause severe lung damage or death.</p> <p><u>Inhalation:</u> No significant adverse health effects are expected to occur upon short-term exposure to this product. Aspiration of liquid into the lungs can cause severe lung damage or death.</p>	
2.3	Symptoms of Overexposure:	<p><u>Eyes:</u> Irritation, redness, and watering.</p> <p><u>Skin:</u> Possible irritation, defatting, or dermatitis (rash), characterized by dry, scaling, red, itching skin.</p> <p><u>Ingestion:</u> Laxative effects. Gastrointestinal discomfort, nausea and headache.</p> <p><u>Inhalation:</u> May cause irritation to the upper respiratory system. Overexposure to sprays or mists may cause chemical pneumonitis.</p>	
2.4	Acute Health Effects:	<p><u>Eyes:</u> Slightly irritating, but will not permanently injure eye tissue.</p> <p><u>Skin:</u> Low toxicity. Frequent or prolonged contact may be irritating to the skin at the site of contact.</p> <p><u>Ingestion:</u> Mild toxicity. Laxative effects. Gastrointestinal discomfort, nausea and headache.</p> <p><u>Inhalation:</u> Negligible. At elevated temperatures or through mechanical action, may form vapors, mists or fumes that may be irritating to the eyes, nose, throat and lungs.</p>	
2.5	Chronic Health Effects:	Prolonged or repeated skin contact can cause mild irritation and inflammation characterized by drying, cracking, or dermatitis.	
2.6	Target Organs:	Eyes, skin.	

## 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	ppm	ppm	ES-TWA	ES-STEL	ES-PEAK	TLV	STEL		IDLH
WATER	7732-18-5	ZC0110000	231-791-2	60-100	NE	NE	NE	NE	NF	NF	NF	NE	NE	NE	
PROPYLENE GLYCOL	57-55-6	TY2000000	200-338-0	5-10	NA	NA	10	NF	NF	NF	NA	NA	NA		
GLYCOL ETHER DB	112-34-5	KJ9100000	203-961-6	1-5	NA	NA	NF	NF	NF	NF	NA	NA	NA		
ETHYLENEDIAMINETETRAACETIC ACID (EDTA)	60-00-4	AH4025000	200-449-4	1-5	NA	NA	NF	NF	NF	NF	NA	NA	NA		
PROPRIETARY ADDITIVES	NA	NA	NA	1-5	NA	NA	NF	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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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards

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## 4. FIRST AID MEASURES

4.1	First Aid:	<p><b>Ingestion:</b> DO NOT INDUCE VOMITING. Contact ChemTrec at +1 (800) 424-9300 or +1 (703) 527-3887 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><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>
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4.2	Medical Conditions Aggravated by Exposure:	Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin).	<table border="1"> <tr><td colspan="2"><b>HEALTH</b></td><td><b>2</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>0</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>2</b>	<b>FLAMMABILITY</b>		<b>0</b>	<b>PHYSICAL HAZARDS</b>		<b>0</b>	<b>PROTECTIVE EQUIPMENT</b>		<b>B</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>B</b>																	
<b>EYES</b>	<b>SKIN</b>																		

## 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.	
5.2	Extinguishing Methods:	Use fire-extinguishing media appropriate for surrounding materials.	
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 and silicon. 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.</p> <p><b>Small Spills:</b> (e.g., ≤ 1.0 gallon (3.8 L)) - 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.</p> <p><b>Large Spills:</b> (e.g., &gt; 1.0 gallon (3.8 L)) - Keep incompatible materials (e.g., organics such as oil) 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. Avoid temperatures above 40°C (120°F). Keep away from incompatible substances (see Section 10). Protect containers from physical damage.
7.3	Special Precautions:	Empty containers may retain hazardous product residues.







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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:	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.	
8.3	Eye Protection:	Safety glasses with side shields must be used when handling or using this product. A protective face shield is also recommended.	
8.4	Hand Protection:	Wear protective, chemical-resistant gloves (e.g., neoprene) when using or handling this product.	
8.5	Body Protection:	A chemical resistant apron and/or protective clothing are also recommended when handling or using this product.	

## 9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Colorless liquid
9.2	Odor:	Mild Odor
9.3	Odor Threshold:	NA
9.4	pH:	≤ 8.5
9.5	Melting Point/Freezing Point:	≤ 0 °C (32 °F)
9.6	Initial Boiling Point/Boiling Range:	≥ 100 °C (212 °F)
9.7	Flashpoint:	NA
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	NA
9.11	Relative Density:	1.025 g/mL
9.12	Solubility:	Soluble in water
9.13	Partition Coefficient (log P <sub>ow</sub> ):	EDTA: log P <sub>ow</sub> : 8.85 - 10.44 @ 20 °C (68 °F); Glycol Ether DB: log P <sub>ow</sub> : 1 @ 20 °C (68 °F)
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	NA
9.17	Other Information:	% VOC: ≤ 51 g/L

## 10. STABILITY & REACTIVITY

10.1	Stability:	Stable at normal temperatures.
10.2	Hazardous Decomposition Products:	Fumes, smoke, carbon monoxide, silicon oxides.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Open flames, sparks, high heat, and close proximity to incompatible substances.
10.5	Incompatible Substances:	Strong acids, oxidizers and some metals (e.g., lead, tin/tin oxides, zinc, aluminum).

## 11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation: NO	Absorption: YES	Ingestion: YES
11.2	Toxicity Data:	Data from scientific literature is shown below: EDTA: LD <sub>50</sub> (oral, rat) = 4,500 mg/kg; Glycol Ether DB: LD <sub>50</sub> (oral, rat) = 7,291 mg/kg		
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:	Do not let product enter drains.



## 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:	NA

## 14. TRANSPORTATION INFORMATION

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 does not contain any substances subject to SARA Title III, section 313 reporting requirements.	
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):	<u>Ethylenediaminetetraacetic Acid</u> : 2,270 kg (5,000 lbs)	
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 D2B (Materials Causing Other Toxic Effects).	
15.7	State Regulatory Information:	<u>Propylene Glycol</u> is found on the following state criteria lists: Massachusetts Hazardous Substances List (MA), and Pennsylvania Right-to-Know List (PA). <u>Ethylenediaminetetraacetic Acid</u> is found on the following state criteria lists: 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 listed in Annex I of EU Directive 67/548/EEC. <u>Glycol Ether DB</u> : Irritant (Xi). <u>Risk Phrases</u> (R): R36 – Irritating to eyes. <u>Safety Phrases</u> (S): S2-13-24/25-26-36/39 - Keep out of reach of children. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately. Wear suitable gloves and eye/face protection. <u>Ethylenediaminetetraacetic Acid</u> : Irritant (Xi). <u>Risk Phrases</u> (R): R36 – Irritating to eyes. <u>Safety Phrases</u> (S): S2-13-24/25-26-36/39 - Keep out of reach of children. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately. Wear suitable gloves and eye/face protection. <u>HazChem Code</u> : None allocated. <u>Poisons Schedule</u> : None allocated	




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## 16. OTHER INFORMATION

16.1	Other Information:	<b>WARNING! HARMFUL IF SWALLOWED. CAUSES SERIOUS EYE IRRITATION.</b> Avoid contact with eyes and skin. Wear protective gloves/eye 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. Wear suitable eye protection and gloves. Keep locked up and away from food or drinks. <b>KEEP OUT OF REACH OF CHILDREN.</b>	
16.2	Terms & Definitions:	See next to last 2 pages 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 & K & Engineering, Inc.'s knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are 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>K &amp; N Engineering, Inc.</b> P.O. Box 1329 Riverside, CA 92502-1329 USA Tel: +1 (800) 858-3333 Fax: +1 (951) 826-4001 E-Mail: tech@knfilters.com <a href="http://www.knfilters.com">http://www.knfilters.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>	



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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

HEALTH
FLAMMABILITY
PHYSICAL HAZARDS
PERSONAL PROTECTION

### 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

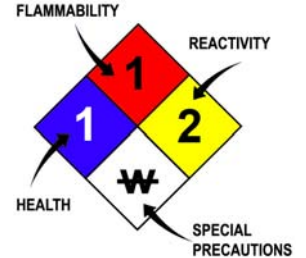
### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

### 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, 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:

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

<b>CHEMTREC</b> In-Country Dial Numbers	Local # Provided in Country	Toll Free in Country*	Greeting Language
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<b>AFRICA</b>			
CHEMTREC South Africa*		0-800-983-611	English

<b>SOUTH AMERICA</b>			
CHEMTREC Argentina (Buenos Aires)	+(54)-1159839431		Latin American Spanish
CHEMTREC Brazil (Rio De Janeiro)	+(55)-2139581449		Portuguese
CHEMTREC Chile (Santiago)	+(56)-225814934		Latin American Spanish
CHEMTREC Colombia *		01800-710-2151	Latin American Spanish
CHEMTREC Mexico*		01-800-681-9531	Latin American Spanish
CHEMTREC Peru (Lima)	+(51)-17071295		Latin American Spanish

<b>ASIA</b>			
CHEMTREC China*	4001-204937		Mandarin
CHEMTREC Hong Kong (Hong Kong)*		800-968-793	Cantonese
CHEMTREC India *		000-800-100-7141	Hindi
CHEMTREC Indonesia*		001-803-017-9114	Indonesian
CHEMTREC Japan (Tokyo)	+(81)-345209637		Japanese
CHEMTREC Malaysia *		1-800-815-308	Malay
CHEMTREC Philippines *		1-800-1-116-1020	Tagalog
CHEMTREC Philippines (Manila)	+(63) 632-395-3308		Tagalog
CHEMTREC Singapore*		800-101-2201	English and Mandarin
CHEMTREC Singapore	+(65)-31581349		English and Mandarin
CHEMTREC South Korea*		00-308-13-2549	Korean
CHEMTREC Taiwan*		00801-14-8954	Mandarin
CHEMTREC Thailand *		001-800-13-203-9987	Thai

<b>AUSTRALASIA</b>			
CHEMTREC Australia (Sydney)	+(61)-290372994		English
CHEMTREC New Zealand (Auckland)*	+(64)-98010034		English

<b>EUROPE</b>			
<b>CHEMTREC Belgium (Brussels)</b>	+ (32)-28083237		French and Flemish
<b>CHEMTREC Czech Republic (Prague)</b>	+ (420)-228880039		Czech
<b>CHEMTREC Denmark</b>	+ (45)-69918573		Danish
<b>CHEMTREC France</b>	+ (33)-975181407		French
<b>CHEMTREC Germany *</b>		0800-181-7059	German
<b>CHEMTREC Hungary (Budapest)</b>	+ (36)-18088425		Hungarian
<b>CHEMTREC Italy *</b>		800-789-767	Italian
<b>CHEMTREC Italy (Milan)</b>	+ (39)-0245557031		Italian
<b>CHEMTREC Netherlands</b>	+ (31)-858880596		Dutch
<b>CHEMTREC Poland (Warsaw)</b>	+ (48)-223988029		Polish
<b>CHEMTREC Portugal</b>	+ (351)-308801773		Portuguese
<b>CHEMTREC Russia*</b>		8-800-100-6346	Russian
<b>CHEMTREC Slovakia (Bratislava)</b>	+ (421)-233057972		Slovak
<b>CHEMTREC Spain*</b>		900-868538	European Spanish
<b>CHEMTREC Sweden (Stockholm)</b>	+ (46)-852503403		Swedish
<b>CHEMTREC Switzerland (Zurich)</b>	+ (41)-435016715		Swiss German, French and Italian
<b>CHEMTREC UK (London)</b>	+ (44)-870-8200418		English

<b>MIDDLE EAST</b>			
<b>CHEMTREC Bahrain (Bahrain)</b>	+ (973)-16199372		Arabic
<b>CHEMTREC Israel (Tel Aviv)</b>	+ (972)-37630639		Hebrew

**\*Phone numbers for countries marked with an asterisk must be dialed within the country**