Page 1 of 6 **GC-043**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision Date: 4/3/2020 SDS Revision: 1.0 1. PRODUCT & COMPANY IDENTIFICATION 11 Product Name Hand Sanitizer 80% 1.2 Chemical Name: Ethanol solution 1.3 Synonyms Trade Names: 1.4 FDA Health Act Hand Sanitizer 1.5 1.6 1.7 1.8 1.9 HAZARDS IDENTIFICATION Hazard Identification: 2.1 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). WARNING! HIGHLY FLAMMABLE LIQUID AND VAPOR. CAUSES SERIOUS EYE IRRITATION. Classification: Flam. Liq. 2; Eye Irrit. 2B 22 Label Elements: Hazard Statements (H): H225 - Highly flammable liquid and vapor. H319 - Causes serous eye Precautionary Statements (P): P210 - Keep away from heat/sparks/open flame/hot surfaces - No Smoking. P233 - Keep container tightly closed. P261 - Avoid breathing vapors/mist/spray. P272 -Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective eye protection/face protection. P305+P351+P338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. P370+P378 - In case of fire: Use CO₂, Halon (if permitted), dry chemical, or foam for extinction. P403+P235 -Store in a well-ventilated place. Keep cool. P501 - Dispose of contents/container to a licensed treatment, storage or disposal facility (TSDF). 2.3 Other Warnings: KEEP OUT OF REACH OF CHILDREN. In the event of an exposure or medical inquiry involving this product, please contact a physician or local poison control center, who may seek advice from the U.S. manufacturer, and show them this 3. COMPOSITION & INGREDIENT INFORMATION EXPOSURE LIMITS IN AIR (mg/m³) ACGIH NOHSC OSHA ppm ppm ppm ES-ES-ES-CHEMICAL NAME(S) CAS No. RTECS No. **EINECS No** STEL TWA STEL PEAK PEL STEL IDLH OTHER 80-90 64-17-5 KQ6300000 200-578-6 1000 | 3000 | 1000 | 1800 | NF 1000 1900 3300 ETHANOL (SD ALCOHOL 40B) Flam. Liq. 2; H225 7732-18-5 ZC0110000 231-191-2 10-20 ΝE NE NF NF NF NE NE NE WATER 56-81-5 MA8050000 200-289-5 1-5 NA NA NF NF NA NF NA NA **GLYCERIN** 7722-84-1 MX0900000 231-765-0 0-1 1.0 NE 1.0 NF NF 1.0 NE 75 HYDROGEN PEROXIDE (33%) Eye Irrit. 2; H319 FIRST AID MEASURES 4 1 First Aid: Ingestion: DO NOT INDUCE VOMITING. Contact ChemTrec at +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. Flush eyes thoroughly with copious amounts of water for at least 15 minutes, holding eyelid(s) open to Eyes: ensure complete flushing. If irritation persists, seek immediate medical attention. Skin: Remove contaminated clothing and wash affected areas with soap and water. If irritation persists, seek prompt medical attention. Do not wear contaminated clothing until after it has been properly cleaned. Remove victim to fresh air at once. If breathing is difficult, administer supplemental oxygen and seek Inhalation: immediate medical attention. If breathing stops, perform artificial respiration. Effects of Exposure: 4.2 Ingestion: If product is swallowed, may cause nausea, vomiting and/or diarrhea. Moderately irritating to the eyes. Eyes: This product can cause mild, transient skin irritation with short-term exposure. This product can cause Skin: allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure.

Vapors of this product may be irritating to the nose, throat and other tissues of the respiratory system.

Inhalation:

Page 2 of 6

GC-043

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

SDS Revision: 1.0

SDS Revision Date: 4/3/2020

4.3	Symptoms of Overexposure:	4. FIRST A								0	
	Symptoms of Overexposure.	may cause redness, itching and watering. The product can cause allergic skin reactions (e.g., rashes, welts, dermating upon prolonged or repeated exposure.									
.4	Acute Health Effects:	Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can caus drowsiness, dizziness, headaches and nausea.									
.5	Chronic Health Effects:	The material may accentuate any	pre-existiı	ng derma	ititis condi	ion.					
6	Target Organs:	Eyes, Skin & Respiratory System.									
7	Medical Conditions Aggravated by Exposure:	Persons with pre-existing skin dis								1	
	Aggiavated by Exposure.	kidney function may be more	susceptib	le to th	e effects	of the	FLAMM	ABILIT'	′		3
		substance.					PHYSIC				0
							PROTE			ENT	В
										LIVI	<u> </u>
							EYES	SKIN			
		5. FIREF	IGHT	ING N	IEASU	RES					
1	Fire & Explosion Hazards:	Keep away from heat, lit cigarette to high temperatures, may product (e.g., CO, CO ₂) and nitrogen (e.g.,	s, sparks ce hazard	& open lous dec	flame. Ke	ep conta					
2	Extinguishing Methods:	Water, Foam, CO ₂ , Dry Chemical,			d)						
.3	Firefighting Procedures:	As in any fire, wear MSHA/NIOSH approved self-contained breathing apparatus (pressure-demand) and full protective gear. Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personnel. Fight fire upwind. 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. ACCIDENT	ΓAL R	ELEA	SE ME	ASUF	RES				
		Equipment. CAUTION – may be a For small spills (e.g., < 1 gallor Maximize ventilation (open doors absorbent material and place into local, state and federal regulation soap. Remove any contaminated For large spills (e.g., ≥ 1 gallon material (e.g., sand or earth). Us recovery or disposal and solid dik promptly and wash affected skin	n (3.8 L) s and win appropria s. Wash clothing a (3.8 L)), e ONLY n) wear andows) ate close all affe and wash deny endon-sparial to sep	appropriate and secure d containe cted areas thoroughl try to all u king tools	e all souer(s) for and ou y before unprotection recovariation in all all all all all all all all all al	urces of indisposal. tside of concerned individual rery and club, or proper d	gnition. Dispose ontainer volumes. Dispose ontainer volumes. Disposal.	Remove of prope with plen ke and Transfer Remove	e spilled rly in ac ty of wa contain s liquid to contami	material cordance rm water spill with i containers nated clot
		and open bodies of water.									ilcipai sev
		7 HANDLING	9 CTC		E INIEC		TION				ilcipai sev
1	Work & Hygiana Pragtices	7. HANDLING									
1	Work & Hygiene Practices:	Use normal hygiene practices. A eating, drinking, or smoking. God	void dire	ct skin c	ontact. W	ash han	ds thoroug				ct and be
	Work & Hygiene Practices: Storage & Handling:	Use normal hygiene practices. A eating, drinking, or smoking. Goc contaminated clothing, are recomm	void dire	ct skin c	ontact. W	ash han	ds thoroug				ct and be
2	,,	Use normal hygiene practices. A eating, drinking, or smoking. God	void direct od person nended.	ct skin c al hygie	ontact. W ne practice	ash han es, such	ds thorouզ as washin	g any sk	in contac	ct areas	ct and be
2	Storage & Handling:	Use normal hygiene practices. A eating, drinking, or smoking. Goc contaminated clothing, are recommoded with the contaminated clothing are recommoded. Follow all instructions on product is	void direct od person mended. abel. Kee	ct skin c al hygier ep contai	ontact. W ne practice ner closed	ash han es, such when no	ds thoroug as washin ot in use.	g any sk	in contac	ct areas	ct and be
3	Storage & Handling:	Use normal hygiene practices. A eating, drinking, or smoking. Goc contaminated clothing, are recommod Keep away from sources of heat. Follow all instructions on product to find children.	void direct od person mended. abel. Kee	ct skin c al hygiel ep contai	ontact. W ne practice ner closed	ash han es, such when no	ds thoroug as washin ot in use.	g any sk	in contac	ct areas	ct and be
3	Storage & Handling: Special Precautions:	Use normal hygiene practices. A eating, drinking, or smoking. Goc contaminated clothing, are recommod Keep away from sources of heat. Follow all instructions on product to find children. 8. EXPOSURE CONT	void directed person nended. ACC	ct skin c al hygier ep contai	ne practice	when no	ds thoroug as washin ot in use.	g any sk	and all	chemical	ct and be and remo
3	Storage & Handling: Special Precautions: Exposure Limits:	Use normal hygiene practices. A eating, drinking, or smoking. Goc contaminated clothing, are recommod Keep away from sources of heat. Follow all instructions on product to find children. 8. EXPOSURE CONT	void directed person nended. abel. Kee ROLS ACC	ct skin c al hygier ep contai R PE BIH STEL	ne practice ner closed RSON	when no	ds thoroug as washin ot in use.	g any sk Keep this TION PEL	osha	chemical	ct and be and remo
3	Storage & Handling: Special Precautions: Exposure Limits:	Use normal hygiene practices. A eating, drinking, or smoking. Goc contaminated clothing, are recommod Keep away from sources of heat. Follow all instructions on product is of children. 8. EXPOSURE CONT CHEMICAL NAME(S) ETHANOL (SD ALCOHOL 40B)	void directed person nended. ACC	ct skin c al hygier ep contai	ner closed RSON ES-TWA 1000	when no	ds thoroug as washin ot in use.	g any sk	and all	chemical	ct and be and remo
.1 .2 .3 .1	Storage & Handling: Special Precautions: Exposure Limits:	Use normal hygiene practices. A eating, drinking, or smoking. Goc contaminated clothing, are recommod Keep away from sources of heat. Follow all instructions on product to find children. 8. EXPOSURE CONT	ROLS ACC TLV 1000 1.0 or natural remove a	et skin c al hygier ep contai REPE SIH STEL 3000 NE I ventilat and prev	RSON. ES-TWA 1000 1.0 on is suffient buildu	when no NH	as washin ot in use. ROTEC ES- PEAK NF NF nen this proors or mi	Keep this TION PEL 1000 1.0 roduct is st genera	OSHA STEL 1900 NE in use.	chemical IDLH 3300 75 Use loon the ha	oct and be and remo

Page 3 of 6 **GC-043**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.0 SDS Revision Date: 4/3/2020

8.4	Eye Protection:	EXPOSURE CONTROLS & PERSONAL PROTECTION – cont'd
0.4	Eye Protection:	AVOID EYE CONTACT DUE TO IRRITATION POTENTIAL. Wear protective eyewear (e.g., safety glasses with side-shield) at all times when handling large quantities (e.g., ≥ 1 gallon (3.8 L)) of this product. Always use protective eyewear when cleaning spills or leaks. Contact lenses pose a special hazard: soft lenses may absorb and concentrate irritants.
3.5	Hand Protection:	None required under normal conditions of use. However, may cause skin irritation in some sensitive
		individuals. If anticipated that prolonged & repeated skin contact will occur during use of this product, wear latex or rubber gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the EU member states.
3.6	Body Protection:	No special body protection is required under typical circumstances of use and handling. If necessary,
		refer to appropriate standards of Canada, the EU member states, or U.S. OSHA.
		9. PHYSICAL & CHEMICAL PROPERTIES
9.1	Appearance:	Clear to slightly hazy liquid
9.2	Odor:	NA NA
9.3	Odor Threshold:	NA NA
9.4	pH:	3
9.5	Melting Point/Freezing Point:	NA NA
9.6	Initial Boiling Point/Boiling Range:	78.3 °C (172.94 °F) as ethanol
9.7	Flashpoint:	17.22 - 18.33 °C (63 - 65 °F)
9.8	Upper/Lower Flammability	LEL 3.3, UEL 19.0
9.9	Limits: Vapor Pressure:	
9.9	Vapor Pressure. Vapor Density:	NA
9.10	Relative Density:	0.86
9.12	Solubility:	Soluble in water
9.13	Partition Coefficient (log Pow):	NA
9.14	Autoignition Temperature:	NA NA
9.15	Decomposition Temperature:	NA NA
9.16	Viscosity:	NA NA
9.17	Other Information:	NA NA
	outer miorination.	IVA
		10. STABILITY & REACTIVITY
10.1	Stability:	Relatively stable under ambient conditions when stored properly.
10.2	Hazardous Decomposition Products:	If exposed to extremely high temperatures, products of thermal decomposition may include irritating vapors and toxi gases (e.g., oxides of carbon & nitrogen).
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Exposure or contact to extreme temperatures, incompatible chemicals, strong light sources, sparks, flame.
10.5	Incompatible Substances:	Strong oxidizers, peroxides, strong acids or alkalis.
		11. TOXICOLOGICAL INFORMATION
11.1	Routes of Entry:	Inhalation: YES Absorption: YES Ingestion: NO
11.2	Toxicity Data:	This product has NOT been tested on animals to obtain toxicology data.
11.3	Acute Toxicity:	See Section 4.4
11.4	Chronic Toxicity:	See Section 4.5
11.5	Suspected Carcinogen:	Ethanol: California Proposition 65 ((CA65) ethanol in alcoholic beverages)
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 4.2
11.8	Biological Exposure Indices:	NE NE
11.9	Physician Recommendations:	Treat symptomatically.
		42 ECOLOCICAL INFORMATION
12 1	Environmental Stability	12. ECOLOGICAL INFORMATION
12.1	Environmental Stability:	There are no specific data available for this product. The components of this product will slowly degrade over time into variety of organic compounds. Specific environmental data available for the components of this product are as follows Ethanol : In water, will volatilize and probably degrade.
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 fate
12.0	Enous on Aquatic Life.	There are no specific data available for this product; nowever, very large releases of this product may be national to overexposed aquatic life.

Page 4 of 6 GC-043

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision Date: 4/3/2020 SDS Revision: 1.0 13. DISPOSAL CONSIDERATIONS Waste Disposal: 13.1 Waste disposal must be in accordance with appropriate Federal, state, and local regulations. 13.2 Special Considerations: U.S. EPA Waste Number: D001 (characteristic - ignitable) 14. TRANSPORTATION INFORMATION The basic description (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. 49 CFR (GND): UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 1.0 L); or CONSUMER COMMODITY, ORM-D - until 12/31/2020 * IATA (AIR): 14.2 UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 0.5 L); or ID8000, CONSUMER COMMODITY, 9 (IP VOL ≤ 0.5 L) IMDG (OCN): 14.3 UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 1.0 L) 144 TDGR (Canadian GND): UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 1.0 L) ADR/RID (EU): UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 1.0 L) SCT (MEXICO): 14.6 UN1170, ETANOL EN SOLUCIÓN, 3, II, (CANT. LTDA., (IP VOL ≤ 1.0 L)) ADGR (AUS): 14.7 UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 1.0 L) 15. REGULATORY INFORMATION SARA Reporting Requirements: 15.1 This product does not contain any substances subject to SARA Title III, section 313 reporting requirements SARA TPQ: 15.2 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. CERCLA Reportable Quantity: 15 4 Ethanol: 2,270 kg (5,000 lbs) Other Federal Requirements: 15.5 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 Other Canadian Regulations: 15.6 This product has been classified according to the hazard criteria of the CPR and the SDS 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 B2, D2B (Flammable Liquid, Other Toxic Effects) State Regulatory Information: Ethanol is found on the following state criteria list: CA, NJ, FL, MA, MN, PA and WA. 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). This product does not contain any chemicals known to the State of California to cause cancer or other reproductive harm. For more information go to www.P65Warnings.ca.gov

This product is found on the following inventory lists: Australia - AICS, China - IECSC, Europe - ELINCS/EINEC,

Japan - ENCS; Korea - KECI; New Zealand - NZIoC; {Philippines - PICCS; USA - TSCA

Other Requirements:

15.8

Page 5 of 6 **GC-043**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.0 SDS Revision Date: 4/3/2020

16. OTHER INFORMATION					
16.1	Other Information:	WARNING! HIGHLY FLAMMABLE LIQUID AND VAPOR. CAUSES SERIOUS EYE IRRITATION. For external use only. Use only as directed. Discontinue use immediately if irritation develops. Keep away from sources of ignition, sparks, open flames, hot surfaces. No smoking. Avoid breathing vapors, mist or spray. Contaminated work clothing should not be allowed out of the workplace. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. In case of fire use CO ₂ , Halon (if permitted), dry chemical, or foam for extinction. Keep container tightly closed when not in use. KEEP OUT OF REACH OF CHILDREN.			
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 & Goodwin'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:				
16.5	Prepared by:				



Page 6 of 6 **GC-043**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.0 SDS Revision Date: 4/3/2020

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.	CAS No. Chemical Abstract Service Number		
RTECS No. Registry of Toxic Effects of Chemical Substances Number			
EINECS No.	European Inventory of Existing Commercial Chemical Substances Number		

EXPOSURE LIMITS IN AIR:

ACGIH	GIH American Conference on Governmental Industrial Hygienists	
IDLH	Immediately Dangerous to Life and Health	
NOHSC	National Occupational Health and Safety Commission (Australia)	
OSHA	U.S. Occupational Safety and Health Administration	
PEL	Permissible Exposure Limit	
STEL	Short Term Exposure Limit	
TLV Threshold Limit Value		
TWA Time Weighted Average		

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.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

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



PERSONAL PROTECTION RATINGS:

Α			
В			
С	ELL	THE STATE OF THE S	
D		H.	
Е			
F	(EV)	THE NAME OF THE PERSON OF THE	

G				
Η			H.	
ı				
J		(A)	E	
K	FI	(ELV)	M	
X	Consult your supervisor or SOPs for special handling directions.			SOPs for



OTHER STANDARD ABBREVIATIONS:

Carc	Carcinogenic	
Irrit	Irritant	
NA	Not Available	
NR	No Results	
ND	Not Determined	
NE	Not Established	
NF	Not Found	
SCBA	Self-Contained Breathing Apparatus	
Sens	Sensitization	
STOT RE	Specific Target Organ Toxicity – Repeat Exposure	
STOT SE	SE Specific Target Organ Toxicity – Single Exposure	

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILI	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	FLAMMABILITY
1	Slight Hazard	. =
2	Moderate Hazard	REACTIVITY
3	Severe Hazard	
4	Extreme Hazard	
ACD	Acidic	
ALK	Alkaline	
COR	Corrosive	/ Y ₩ Y
₩	Use No Water	HEALTH
ОХ	Oxidizer	SPECIAL
TREFOIL	Radioactive	PRECAUTIONS

TOXICOLOGICAL INFORMATION:

Lethal Dose (solids & liquids) which kills 50% of the exposed animals LC50 Lethal concentration (gases) which kills 50% of the exposed animal ppm Concentration expressed in parts of material per million parts TD10 Lowest dose to cause a symptom TCL0 Lowest concentration to cause a symptom TD10, LD10, & LD0 or TC, TC0, LC10, & LC0 IARC International Agency for Research on Cancer NTP National Toxicology Program						
ppm Concentration expressed in parts of material per million parts TD _{Io} Lowest dose to cause a symptom TCLo Lowest concentration to cause a symptom TD _{Io} , LD _{Io} , & LD _o or TC, TC _o , LC _{Io} , & LC _o IARC International Agency for Research on Cancer	LD ₅₀	Lethal Dose (solids & liquids) which kills 50% of the exposed animals				
TDIo Lowest dose to cause a symptom TCLo Lowest concentration to cause a symptom TDIo, LDIo, & LDo or TC, TCo, LCio, & LCo IARC International Agency for Research on Cancer	LC ₅₀	Lethal concentration (gases) which kills 50% of the exposed animal				
TCLo Lowest concentration to cause a symptom TD _{Io} , LD _{Io} , & LD _o or Lowest dose (or concentration) to cause lethal or toxic effects TC, TC _o , LC _{Io} , & LC _o IARC International Agency for Research on Cancer	ppm	Concentration expressed in parts of material per million parts				
TD _{Io} , LD _{Io} , & LD _o or Lowest dose (or concentration) to cause lethal or toxic effects TC, TC _o , LC _{Io} , & LC _o IARC International Agency for Research on Cancer	TD _{Io} Lowest dose to cause a symptom					
TC, TCo, LCio, & LCo IARC International Agency for Research on Cancer	TCLo	Lowest concentration to cause a symptom				
IARC International Agency for Research on Cancer	TD _{Io} , LD _{Io} , & LD _o or	Lowest dose (or concentration) to cause lethal or toxic effects				
3 7	TC, TCo, LCio, & LCo					
NTP National Toxicology Program	IARC	International Agency for Research on Cancer				
	NTP	National Toxicology Program				
RTECS Registry of Toxic Effects of Chemical Substances	RTECS	Registry of Toxic Effects of Chemical Substances				
BCF Bioconcentration Factor	BCF	Bioconcentration Factor				
TL _m Median threshold limit	TLm	Median threshold limit				
log Kow or log Koc Coefficient of Oil/Water Distribution	log Kow or log Koc	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	EU European Union (European Union Directive 67/548/EEC)			
WGK	Wassergefährdungsklassen (German Water Hazard Class)			

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

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

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

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