


1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	CALLUS FREE EUCALYPTUS-PEPPERMINT
1.2	Chemical Name:	Potassium Hydroxide Solution
1.3	Synonyms:	NA
1.4	Trade Names:	Callus Free Eucalyptus-Peppermint
1.5	Product Use:	Professional Use Only
1.6	Distributor's Name:	PREMIUMNAILS™
1.7	Distributor's Address:	370 Meyer Circle, Suite 101, Corona, CA 92879 USA
1.8	Emergency Phone:	INFOTRAC: +1 (352) 323-3500 / +1 (800) 535-5053 (CONTRACT NO. 80093)
1.9	Business Phone / Fax:	+1 (714) 862-2080 / +1 (714) 862-2086

2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	<p>This product is classified as a hazardous substance and as dangerous goods according to the classification criteria of NOHSC: 1008 (2004) and ADG Code (Australia).</p> <p>DANGER! HARMFUL IF SWALLOWED. CAUSES MILD SKIN IRRITATION. CAUSES EYE IRRITATION.</p> <p><u>Hazard Statements (H):</u> H302 – Harmful if swallowed. H316 – Causes mild skin irritation. H320 Causes eye irritation.</p> <p><u>Precautionary Statements (P):</u> P264 – Wash hands and exposed skin areas thoroughly with soap and warm water after handling. P270 – Do not eat, drink or smoke when using this product. P301+P312 – IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P330 Rinse Mouth. 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. P332+P313 – If skin irritation occurs: Get medical advice attention. P501 – Dispose of contents/container to licensed treatment, storage, and disposal firm (TSDf).</p>	
2.2	Effects of Exposure:	<p><u>Ingestion:</u> Harmful if swallowed. Causes irritation of the digestive tract and mucous membranes with possible burns.</p> <p><u>Eyes:</u> Causes severe eye burns or possibly blindness. Symptoms of overexposure may include redness, itching, irritation and watering.</p> <p><u>Skin:</u> May be harmful if absorbed through the skin. Causes severe skin burns (as a concentrate). May cause an allergic skin reaction.</p> <p><u>Inhalation:</u> May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.</p>	
2.3	Symptoms of Overexposure:	Symptoms of skin overexposure in individuals may include redness, itching, and irritation, burning sensation, or blistering of affected areas. Overexposure in eyes may cause redness, itching and watering, burns or possible blindness.	
2.4	Acute Health Effects:	Severe irritation to eyes and moderate irritation to skin near affected areas. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract.	
2.5	Chronic Health Effects:	The material may aggravate any pre-existing skin or eye conditions (e.g., dermatitis, conjunctivitis). Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.	
2.6	Target Organs:	Eyes, skin and respiratory system.	

3. COMPOSITION & INGREDIENT INFORMATION

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m ³)									OTHER	
					ACGIH		NOHSC			OSHA					
					TLV	STEL	ppm	ppm	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL		IDLH
AQUA (WATER)	7732-18-5	ZC0110000	231-791-2	60-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
POTASSIUM HYDROXIDE	1310-58-3	TT2100000	215-181-3	5-10	(2)	NA	(2)	NF	NF	(2)	NA	NA	NA		Acute.tox.4*; Skin Corr. 1A; H302, H314
CARBOMER	9007-20-9	NA	NA	1-5	NA	NA	NF	NF	NF	NA	NA	NA	NA		
PROPYLENE GLYCOL	57-55-6	TY2000000	200-338-0	1-5	NA	NA	NF	NF	NF	NA	NA	NA	NA		Skin Irrit. 3; Eye Irrit. 2; H316, H320
MENTHOL	89-78-1	OT0350000	201-939-0	0.1-1	NA	NA	NF	NF	NF	NA	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.

3. COMPOSITION & INGREDIENT INFORMATION – cont'd

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m ³)									OTHER
					ACGIH		NOHSC			OSHA				
					ppm		ppm			ppm				
					TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH		
POLYSORBATE-20	9005-64-5	TR7400000	500-018-3	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA		
MENTHA PIPERITA (PEPPERMINT) OIL	8006-90-4	NA	NA	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA		
EUCALYPTUS GLOBULUS LEAF OIL	8000-48-4	LE2530000	283-406-2	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA		
TOCOPHERYL ACETATE	7695-91-2	GA8747000	231-710-0	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA		
ALOE BARBADENSIS LEAF JUICE	85507-69-3	NA	287-390-8	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA		
FRAGRANCE (PARFUM)		NA	NA	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA		

4. FIRST AID MEASURES

4.1	First Aid:	<p>Ingestion: If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give water or milk to an unconscious person. Contact the nearest Poison Control Center or local emergency number. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed.</p> <p>Eyes: Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. If irritation occurs, contact a physician.</p> <p>Skin: If irritation occurs and product is on the skin, rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.</p> <p>Inhalation: Remove victim to fresh air at once.</p>										
4.2	Medical Conditions Aggravated by Exposure:	<p>Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin, and respiratory system).</p> <table border="1" style="width: 100%;"> <tr> <td style="background-color: #0000FF; color: white;">HEALTH</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="background-color: #FF0000; color: white;">FLAMMABILITY</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: #FFA500; color: white;">PHYSICAL HAZARDS</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: #000000; color: white;">PROTECTIVE EQUIPMENT</td> <td style="text-align: center;">B</td> </tr> <tr> <td>EYES</td> <td>SKIN</td> </tr> </table>	HEALTH	3	FLAMMABILITY	0	PHYSICAL HAZARDS	0	PROTECTIVE EQUIPMENT	B	EYES	SKIN
HEALTH	3											
FLAMMABILITY	0											
PHYSICAL HAZARDS	0											
PROTECTIVE EQUIPMENT	B											
EYES	SKIN											

5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	This product is not flammable. If involved in a fire, this product may decompose at high temperatures to form toxic gases (e.g., CO, CO ₂ , NO _x).	
5.2	Extinguishing Methods:	CO ₂ , Halon (if permitted), Dry Chemical, Foam, as authorized.	
5.3	Firefighting Procedures:	When involved in a fire, this product may decompose to produce carbon and nitrogen oxides. First responders should wear eye protection. Structural fire fighters must wear full protective equipment and MSHA/NIOSH-approved self-contained breathing apparatus. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas. If necessary, rinse contaminated equipment with soapy water before returning to service. HazChem Code: 2W	




6. ACCIDENTAL RELEASE MEASURES

.1	Spills:	<p>Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment.</p> <p>For small spills (e.g., < 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 large spills (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). 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> <p>U.S. regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities to the U.S. Coast Guard National Response Center at +1 (800) 424-8802. EU regulations require the consultation of Directive 98/24/EC.</p>
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7. HANDLING & STORAGE INFORMATION

7.1	Work & Hygiene Practices:	Avoid prolonged contact with the product. Avoid breathing vapors of this product. Use in a well-ventilated location (e.g., local exhaust ventilation, fans). After use, wash hands and exposed skin with soap and water. Do not eat, drink or smoke while handling product.
7.2	Storage & Handling:	Keep this material away from heat, sparks and open flame. Open containers slowly on a stable surface. Keep container closed tightly when not in use. Empty container may contain residual amounts of this product; therefore, empty containers should be handled with care. Store containers in a cool, dry location, away from direct sunlight, other light sources, or sources of intense heat. Store away from incompatible materials (see Section 10).
7.3	Special Precautions:	Open containers slowly on a stable surface. Keep container tightly closed when not in use. Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1	Ventilation & Engineering Controls:	When working with large quantities of product, provide adequate ventilation (e.g., local exhaust ventilation, fans). Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes. Ensure appropriate decontamination equipment is available (e.g., sink, safety shower, eye-wash station).
8.2	Respiratory Protection:	No special respiratory protection is required under typical circumstances of use or handling. 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:	Wear protective eyewear (e.g., safety glasses with side-shield) at all times when handling this product. Always use protective eyewear when cleaning spills or leaks. Contact lenses pose a special hazard; soft lenses may absorb and concentrate irritants. 
8.4	Hand Protection:	AVOID SKIN CONTACT DUE TO SENSITIZING POTENTIAL. If anticipated that prolonged & repeated skin contact will occur during use of this product, wear latex or rubber gloves for routine industrial use. Nitrile rubber gloves are better than PVC. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the E.C. member states. 
8.5	Body Protection:	AVOID SKIN CONTACT DUE TO SENSITIZING POTENTIAL. Use impermeable clothing to prevent contact with this product, such as gloves, apron, boots, or whole body suit. If necessary, refer to appropriate standards of Canada, the E.C. member states, or U.S. OSHA. 

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Colorless to opaque, medium viscous gel
9.2	Odor:	Menthol odor
9.3	Odor Threshold:	NA
9.4	pH:	13.0-13.9
9.5	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	NA
9.7	Flashpoint:	7.2 °C (45 °F) estimated
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	29 mm @ 20 °C
9.10	Vapor Density:	Vapor Density (air = 1.0): NA
9.11	Relative Density:	1.06 mg/L @ 25 °C (77 °F)
9.12	Solubility:	Completely soluble.
9.13	Partition Coefficient (log P _{ow}):	NA
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	14000 cPs
9.17	Other Information:	NA

10. STABILITY & REACTIVITY

10.1	Stability:	Stable under ambient conditions when stored properly (see Section 7, Storage and Handling).
10.2	Hazardous Decomposition Products:	If exposed to extremely high temperatures, the products of thermal decomposition may include irritating vapors and carbon oxide gases (e.g., CO, CO ₂).
10.3	Hazardous Polymerization:	May occur, if exposed to extremely high temperatures.
10.4	Conditions to Avoid:	High temperatures, direct sunlight, sources of heat and incompatible materials. Avoid storage temperatures in excess of 23 °C (73.4 °F). Avoid contact with leather, wood and incompatible materials.
10.5	Incompatible Substances:	Product can react explosively with acids, aldehydes, and many other organic chemicals. This product is incompatible with strong oxidizers (e.g., peroxides, superoxides), strong acids (e.g., hydrochloric or muriatic acids) or reducing agents.

11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation: YES	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 and is presented below: Potassium Hydroxide: LD ₅₀ (oral, rat) = 2730 mg/kg		
11.3	Acute Toxicity:	See Section 2.4		
11.4	Chronic Toxicity:	See Section 2.5		
11.5	Suspected Carcinogen:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, or as a known, potential or possible carcinogen by ACGIH, NTP or OSHA.		
11.6	Reproductive Toxicity:	This product is not reported to cause reproductive toxicity in humans.		
	Mutagenicity:	Potassium Hydroxide: mutagenic for mammalian somatic cells.		
	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:	Provide general supportive measures and treat symptomatically. Persons with impaired lung function or asthma-like conditions may experience additional breathing difficulties. May be irritating to skin, eyes and respiratory system, especially after prolonged and/or repeated contact.		

12. ECOLOGICAL INFORMATION


12.1	Environmental Stability:	The components of this product will slowly degrade over time into a variety of organic compounds. Specific environmental data available for some of the components of this product in scientific literature but are not presented in this document.
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:	Waste disposal must be in accordance with appropriate Federal, state, and local regulations.
13.2	Special Considerations:	U.S. EPA Waste Number: D002 (characteristic - corrosivity)

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.

14.1	49 CFR (GND):	UN1814, POTASSIUM HYDROXIDE, SOLUTION, 8, III, LTD QTY (IP VOL ≤ 5.0 L); or CONSUMER COMMODITY, ORM-D – until 01/01/2021	
14.2	IATA (AIR):	UN1814, POTASSIUM HYDROXIDE, SOLUTION, 8, III, LTD QTY (IP VOL ≤ 0.5 L)	
14.3	IMDG (OCN):	UN1814, POTASSIUM HYDROXIDE, SOLUTION, 8, III, LTD QTY (IP VOL ≤ 5.0 L)	
14.4	TDGR (Canadian GND):	UN1814, POTASSIUM HYDROXIDE, SOLUTION, 8, III, LTD QTY (IP VOL ≤ 0.5 L); or "LIMITED QUANTITY" or "QUANTITÉ LIMITÉE" or "LTD QTY" or "QUANT LTÉE" (≤ 1.0 L)	
14.5	ADR/RID (EU):	UN1814, POTASSIUM HYDROXIDE, SOLUTION, 8, III, LTD QTY (IP VOL ≤ 5.0 L)	
14.6	SCT (MEXICO):	UN1814, HIDROXIDO DE POTASIO EN SOLUCIÓN, 8, II, CANTIDAD LIMITADA (IP VOL ≤ 5.0 L)	
14.7	ADGR (AUS):	UN1814, POTASSIUM HYDROXIDE, SOLUTION, 8, III, LTD QTY (IP VOL ≤ 5.0 L)	

15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product does not contain any substances subject to SARA Title III, Section 313 reporting.	
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>Potassium Hydroxide</u> : 454 kg (1,000 lbs)	
15.5	Other Federal Requirements:	This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR subchapter G (Cosmetics).	
15.6	Other Canadian Regulations:	This product has been classified according to the hazard criteria of the CPR and the Safety Data Sheet 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 E, D2B (Corrosive, Other Toxic Effects)	
15.7	State Regulatory Information:	<p><u>Potassium Hydroxide</u> is found on the following state criteria lists: Florida Toxic Substances List (FL); Massachusetts Hazardous Substances List (MA); New Jersey Right-to-Know List (NJ); New York Hazardous Substances List (NY); Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA).</p> <p><u>Propylene Glycol</u> is listed on the following state criteria lists: Minnesota Hazardous Substances List (MN), and PA.</p> <p><u>Polysorbate-20</u> is found on the following state criteria lists: California Hazardous Substances List (CA), and NJ.</p> <p>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 (CA), 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). 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).</p>	
15.8	Other Requirements:	The primary components of this product are listed in Annex I of EU Directive 67/548/EEC: <u>Potassium Hydroxide</u> : Corrosive (C). <u>Risk Phrases</u> (R): 22-35 – Harmful if swallowed. Causes severe burns. <u>Safety Phrases</u> (S): (2-)26-36/37/39-45 - Keep out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. <u>Poisons Schedule</u> : 6 (Potassium Hydroxide)	

16. OTHER INFORMATION

16.1	Other Information:	<p>DANGER! HARMFUL IF SWALLOWED. CAUSES MILD SKIN IRRITATION. CAUSES EYE IRRITATION. Keep only in original packaging. Do not breathe mists. Wash hands and exposed skin areas thoroughly with soap and warm water after handling. 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 with water or shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CONTROL CENTER/doctor/physician for medical advice. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present, and easy to do. Continue rinsing. Store locked up. Use only as directed. KEEP OUT OF REACH OF CHILDREN.</p>	
16.2	Terms & Definitions:	See last 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 & PREMIUMNAILS™ 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>PREMIUMNAILS™ 370 Meyer Circle, Suite 101 Corona, CA 92879 USA Tel: +1 (714) 862-2080 Fax: +1 (714) 862-2086 http://www.premiumnails.com/</p>	
16.5	Prepared by:	<p>ShipMate, Inc. P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 http://www.shipmate.com</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:

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		G	
B		H	
C		I	
D		J	
E		K	
F		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:

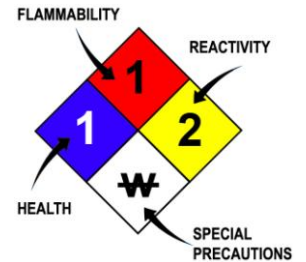
NA	Not Available
NR	No Results
NE	Not Established
ND	Not Determined
ML	Maximum Limit
SCBA	Self-Contained Breathing Apparatus

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 ₅₀	Lethal Dose (solids & liquids) which kills 50% of the exposed animals
LC ₅₀	Lethal concentration (gases) which kills 50% of the exposed animal
ppm	Concentration expressed in parts of material per million parts
TD ₁₀	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD ₁₀ , LD ₁₀ , & LD ₅₀ or TC, TC ₅₀ , LC ₁₀ , & LC ₅₀	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 _m	Median threshold limit
log K _{ow} or log K _{oc}	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