

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

SDS Revision: 5.1-NP

SDS Revision Date: 2/8/2016

## 1. PRODUCT &amp; COMPANY IDENTIFICATION

1.1	Product Name:	<b>OPI AVOPLEX MOISTURE REPLENISHING LOTION</b>
1.2	Chemical Name:	Aqueous Lotion
1.3	Synonyms:	NA
1.4	Trade Names:	AV711, AV713, AV714, AV715, AV716, AV718, AV719
1.5	Product Use:	Professional or Sundry Use Only
1.6	Distributor's Name:	OPI Products, Inc.
1.7	Distributor's Address:	13034 Saticoy Street, No. Hollywood, CA 91605 USA
1.8	Emergency Phone:	<b>CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300 (CCN 16377)</b>
1.9	Business Phone / Fax:	+1 (818) 759-2400 / +1 (818) 759-5776

## 2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	<p>This product is not classified as a hazardous substance or as dangerous goods according to the classification criteria of NOHSC: 1008 (2004) and ADG Code (Australia).</p> <p><b>WARNING! CAUSES EYE IRRITATION.</b></p> <p><u>Classification:</u> Eye Irrit. 2B</p> <p><u>Hazard Statements (H):</u> H320 – Causes eye irritation.</p> <p><u>Precautionary Statements (P):</u> 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 irritations persist: Get medical advice/attention.</p>
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## 3. COMPOSITION &amp; INGREDIENT INFORMATION

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m <sup>3</sup> )									OTHER
					ACGIH		NOHSC			OSHA				
					ppm		ppm			ppm				
					TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH		
WATER	7732-18-5	NA	231-791-2	60-100	NE	NE	NF	NF	NF	NE	NE	NE		
ETHYLHEXYL PALMITATE	29806-73-3	NA	249-862-1	5.0-7.0	NA	NA	NF	NF	NF	NA	NA	NA		
PERSEA GRATISSIMA (AVOCADO) OIL	8024-32-6	CL2680000	232-428-0	3.0-7.0	NA	NA	NF	NF	NF	NA	NA	NA		
GLYCERYL STEARATE	31566-31-1	RG19250000	250-705-4	1.0-5.0	NA	NA	NF	NF	NF	NA	NA	NA		
PEG-100 STEARATE	9004-99-3	NA	NA	0.5-1.5	NA	NA	NF	NF	NF	NA	NA	NA		
POLYACRYLAMIDE	9003-05-8	NA	NA	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
POLYACRYLATE-13	NA	NA	NA	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
STEARAMIDOPROPYL PG-DIMONIUM CHLORIDE PHOSPHATE	83682-78-4	NA	NA	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
LECITHIN	800-43-5	OG7565000	232-307-2	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
PHENOXYETHANOL	122-99-6	KM0350000	204-589-7	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
CAPRYLYL GLYCOL	1117-86-8	NA	214-254-7	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
PARFUM (FRAGRANCE)	NA	NA	NA	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
C13-14 ISOPARAFFIN	246538-79-4	NA	265-149-8	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
CAPRYLIC/CAPRIC TRIGLYCERIDE	65381-09-1	NA	265-724-3	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
CETYL ALCOHOL	36653-82-4	MM0225000	253-149-0	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
PERSEA GRATISSIMA (AVOCADO) OILCE	8024-32-6	CL2680000	232-428-0	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
BENZYL BENZOATE	120-51-4	DG420000	204-402-9	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN	
POLYISOBUTENE	9003-27-4	NA	NA.0	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
XANTHAN GUM	11138-66-2	NA	234-394-2	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
ALLANTOIN	97-59-6	NA	202-592-8	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN	

### 3. COMPOSITION & INGREDIENT INFORMATION – cont'd

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m <sup>3</sup> )									OTHER
					ACGIH		NOHSC			OSHA				
					ppm		ppm			ppm				
					TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH		
LIMONENE	5989-27-5	GW6360000	227-813-5	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN	
ISOEUGENOL	97-54-1	SL78750000	202-590-7	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN	
ETHANOL	64-17-5	KQ6300000	200-578-6	0.0-0.1	1000	1900	1880	NF	NF	1000	1900	3300		
ASCORBYL PALMITATE	137-66-6	NA	205-305-4	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA		
LAURETH-7	3055-97-8	NA	221-283-9	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA		
OLEIC ACID	112-80-1	RG22750000	204-007-1	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA		
POLYSORBATE 20	9005-64-5	NA	NA	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA		
POTASSIUM SORBATE	590-00-1	NA	246-376-1	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA		
LINALOOL	78-70-6	RG57750000	201-134-4	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN	
HEXYL CINNAMAL	101-86-0	GD6560000	202-983-3	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN	
HEXYLENE GLYCOL	107-41-5	SA0810000	203-489-0	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA		
ALOE BARBADENSIS LEAF JUICE	85507-69-3	NA	287-390-8	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA		
GERANIOL	106-24-1	RG5830000	203-377-1	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN	
BUTYLATED HYDROXYTOLUENE (BHT)	128-37-0	GO7875000	204-881-4	0.0-0.1	NA	NA	10	NF	NF	NA	NA	NA		
HYDROXYISOHEXYL 3-CYCLO-HEXENE CARBOXALDEHYDE	31906-04-4	NA	250-863-4	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN	
BENZYL ALCOHOL	100-51-6	DN3150000	202-859-9	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN	
	Acute Tox. 4; H302													
HYDROXYCITRONELLAL	107-75-5	RG7850000	203-518-7	0.0-0.1	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN	

### 4. FIRST AID MEASURES

4.1	First Aid:	<p><b>Ingestion:</b> If ingested, do not induce vomiting. Drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer plenty of 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 and amount of the substance that was swallowed.</p> <p><b>Eyes:</b> If product is in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. Open and close eyelid(s) to ensure thorough irrigation. If problem persists, consult a physician.</p> <p><b>Skin:</b> If redness, dryness or other signs of irritation to the skin develop, wash affected skin areas with plenty of warm water and soap. If irritation persists, consult a physician.</p> <p><b>Inhalation:</b> Remove victim to fresh air at once.</p>											
4.2	Effects of Exposure:	<p><b>Ingestion:</b> If product is swallowed, may cause nausea, vomiting and/or diarrhea.</p> <p><b>Eyes:</b> Slightly irritating to the eyes.</p> <p><b>Skin:</b> May be irritating to skin in some sensitive individuals, especially after prolonged contact.</p> <p><b>Inhalation:</b> Inhalation is unlikely; however, vapors of this product may be slightly irritating to some sensitive individuals.</p>											
4.3	Symptoms of Overexposure:	Symptoms of overexposure may include redness, itching, and irritation.											
4.4	Acute Health Effects:	Redness, itching, and irritation of skin at the site of contact for some sensitive individuals.											
4.5	Chronic Health Effects:	No chronic health effects are known, although symptoms and discomfort may occur for several days following overexposure following ingestion. Components in the fragrance, contained in very small quantities in this product, may be mild allergens to some sensitive individuals.											
4.6	Target Organs:	Eyes, Skin											
4.7	Medical Conditions Aggravated by Exposure:	None known.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #0000FF; color: white;"><b>HEALTH</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td style="background-color: #FF0000; color: white;"><b>FLAMMABILITY</b></td> <td style="text-align: center;"><b>0</b></td> </tr> <tr> <td style="background-color: #FFA500; color: white;"><b>PHYSICAL HAZARDS</b></td> <td style="text-align: center;"><b>0</b></td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>PROTECTIVE EQUIPMENT</b></td> </tr> <tr> <td style="text-align: center;"><b>EYES</b></td> <td style="text-align: center;"><b>SKIN</b></td> </tr> </table>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>0</b>	<b>PHYSICAL HAZARDS</b>	<b>0</b>	<b>PROTECTIVE EQUIPMENT</b>		<b>EYES</b>	<b>SKIN</b>
<b>HEALTH</b>	<b>1</b>												
<b>FLAMMABILITY</b>	<b>0</b>												
<b>PHYSICAL HAZARDS</b>	<b>0</b>												
<b>PROTECTIVE EQUIPMENT</b>													
<b>EYES</b>	<b>SKIN</b>												

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## 5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	This product is non-flammable. When exposed to high temperatures, may produce hazardous decomposition products such as oxides of carbon (e.g., CO, CO <sub>2</sub> ) and nitrogen (e.g., NO <sub>x</sub> ) and smoke.
5.2	Extinguishing Methods:	Water, Foam, CO <sub>2</sub> , Dry Chemical
5.3	Firefighting Procedures:	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.



## 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.</p> <p>For <u>small spills</u> (e.g., &lt; 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves). Remove spilled material with absorbent material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse.</p> <p>For <u>large spills</u> (e.g., ≥ 1 gallon (3.8 L)), deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g., sand or earth). 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>
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## 7. HANDLING &amp; STORAGE INFORMATION

7.1	Work & Hygiene Practices:	Avoid eye contact.
7.2	Storage & Handling:	Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans). Do not store in damaged or unmarked containers or storage devices. Keep containers securely closed when not in use.
7.3	Special Precautions:	Spilled material may present a slipping hazard if left unattended. Clean all spills promptly.

## 8. EXPOSURE CONTROLS &amp; PERSONAL PROTECTION

8.1	Exposure Limits: ppm (mg/m <sup>3</sup> )		ACGIH		NOHSC			OSHA			OTHER
		CHEMICAL NAME(S)	TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH	
		BENZYL BENZOATE	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN
		ALLANTOIN	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN
		LIMONENE	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN
		ISOEUGENOL	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN
		ETHANOL	1000	1900	1880	NF	NF	1000	1900	3300	
		LINALOOL	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN
		HEXYL CINNAMAL	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN
		GERANIOL	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN
		BUTYLATED HYDROXYTOLUENE (BHT)	NA	NA	10	NF	NF	NA	NA	NA	ALLERGEN
		HYDROXYISOHEXYL 3-CYCLO- HEXENE CARBOXYALDEHYDE	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN
		BENZYL ALCOHOL	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN
HYDROXYCITRONELLAL	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN		
8.2	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.									
8.3	Respiratory Protection:	None required if used in a well-ventilated area.									
8.4	Eye Protection:	Avoid eye contact. Protective eyewear (e.g., safety glasses with side-shield) is recommended at all times when handling this product. Always use protective eyewear when cleaning spills or leaks.									
8.5	Hand Protection:	None required under normal conditions of use.									
8.6	Body Protection:	None required under normal conditions of use.									



## 9. PHYSICAL &amp; CHEMICAL PROPERTIES

9.1	Appearance:	Semi-viscous, white cream
9.2	Odor:	Floral odor
9.3	Odor Threshold:	ND
9.4	pH:	6.50
9.5	Melting Point/Freezing Point:	ND
9.6	Initial Boiling Point/Boiling Range:	ND
9.7	Flashpoint:	This product is non-flammable.
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	ND

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**9. PHYSICAL & CHEMICAL PROPERTIES – cont'd**

9.10	Vapor Density:	NA
9.11	Relative Density:	0.995
9.12	Solubility:	Soluble in water
9.13	Partition Coefficient (log P <sub>ow</sub> ):	NA
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	NA
9.17	Other Information:	NA

**10. STABILITY & REACTIVITY**

10.1	Stability:	This product is stable.
10.2	Hazardous Decomposition Products:	Oxides of carbon and nitrogen.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Open flames, sparks, high heat and direct sunlight.
10.5	Incompatible Substances:	None known.

**11. TOXICOLOGICAL INFORMATION**

11.1	Routes of Entry:	Inhalation: NO	Absorption: YES	Ingestion: YES
11.2	Toxicity Data:	The product has not been tested for specific toxicity data.		
11.3	Acute Toxicity:	See Section 4.4		
11.4	Chronic Toxicity:	See Section 4.5		
11.5	Suspected Carcinogen:	Ethanol is listed IARC Group 1. Butylated Hydroxytoluene (BHT) is listed IARC Group 3.		
11.6	Reproductive Toxicity:	This product is not reported to produce reproductive toxicity in humans.		
	Mutagenicity:	This product is not reported to produce mutagenic effects in humans.		
	Embryotoxicity:	This product is not reported to produce embryotoxic effects in humans.		
	Teratogenicity:	This product is not reported to produce teratogenic effects in humans.		
	Reproductive Toxicity:	This product is not reported to produce reproductive effects in humans.		
11.7	Irritancy of Product:	See Section 4.3		
11.8	Biological Exposure Indices:	NE		
11.9	Physician Recommendations:	Treat symptomatically.		

**12. ECOLOGICAL INFORMATION**

12.1	Environmental Stability:	There are no specific data available for this product.
12.2	Effects on Plants & Animals:	There are no specific data available for this product.
12.3	Effects on Aquatic Life:	There are no specific data available for this product.

**13. DISPOSAL CONSIDERATIONS**


13.1	Waste Disposal:	Dispose of in accordance with Federal, state and local regulations.
13.2	Special Considerations:	NA

**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):	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:	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):	NA
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 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 D2B (Other Toxic Effects). 
15.7	State Regulatory Information:	None of the ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI).
15.8	Other Requirements:	The primary components of this product are not listed in Annex I of EU Directive 67/548/EEC: Irritant (Xn). <u>Risk Phrases</u> (R): 36 – Irritating to eyes. <u>Safety Phrases</u> (S): 25-26 Do not ingest and avoid contact with eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

## 16. OTHER INFORMATION

16.1	Other Information:	<b>WARNING! CAUSES EYE IRRITATION.</b> Use only as directed. Discontinue use if irritation develops. IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritations persist: Get medical advice/attention. <b>KEEP OUT OF REACH OF CHILDREN.</b>
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.
16.3	Disclaimer:	This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & OPI's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.
16.4	Prepared for:	<b>OPI Products, Inc.</b> 13034 Saticoy Street No. Hollywood, CA 91605 USA Tel: +1 (818) 759-2400 Fax: +1 (818) 759-5776 <a href="http://www.opi.com">http://www.opi.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>

O·P·I



## 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
C	Ceiling Limit
IDLH	Immediately Dangerous to Life and Health
OSHA	U.S. Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
TLV	Threshold Limit Value

### 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:

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

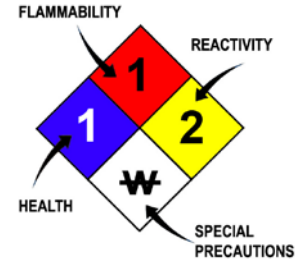
### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

### 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>10</sub>	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD <sub>10</sub> , LD <sub>10</sub> , & LD <sub>0</sub> or TC, TC <sub>0</sub> , LC <sub>10</sub> , & LC <sub>0</sub>	Lowest dose (or concentration) to cause lethal or toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TL <sub>m</sub>	Median threshold limit
log K <sub>ow</sub> or log K <sub>oc</sub>	Coefficient of Oil/Water Distribution

### REGULATORY INFORMATION:

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

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

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

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

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

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

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