



# SAFETY DATA SHEET

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision: 1.0 SDS Revision Date: 11/12/2015

## 1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	<b>DEOXIT® LITHIUM GREASE LUBE/PROTECTANT</b>
1.2	Chemical Name:	See ingredients listed in section 3
1.3	Synonyms:	L260S-N10
1.4	Trade Names:	DeoxIT® Lithium Grease Lube/Protectant
1.5	Product Uses & Restrictions:	Grease Compound
1.6	Distributor's Name:	CAIG Laboratories, Inc.
1.7	Distributor's Address:	12200 Thatcher Court, Poway, CA 92064-6876 USA
1.8	Emergency Phone:	<b>CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300 (CCN XXXXX)</b>
1.9	Business Phone / Fax:	+1 (800) 224-4123

## 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: 1088 (2004) and ADG Code (Australia).</p> <p><b>WARNING! FLAMMABLE AEROSOL. PRESSURIZED CONTAINER; MAY BURST IF HEATED. MAY BE HARMFUL IF SWALLOWED AND ENTERS AIRWAYS. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION.</b></p> <p><u>Classification:</u> Aerosols 2; Asp. Haz. 2; Skin Sens. 1B; Eye Irrit. 2B</p> <p><u>Hazard Statements (H):</u> H223 – Flammable aerosol. H229 – Pressurized container; may burst if heated. H305 – May be harmful if swallowed and enters airways. H317 – May cause an allergic skin reaction. H320 – Causes eye irritation.</p> <p><u>Precautionary Statements (P):</u> P201 – Obtain special instructions before use. P202 – Do not in handle until all safety precautions have ben read and understood. P210 – Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking. P211 – Do not spray on open flames or other ignition source. P251 – Do not pierce or burn, even after use. P261 – Avoid breathing gas/mist/spray. P264 – Wash thoroughly with soap and water after handling. P280 – Wear protective gloves/protective clothing/ eye protection/ face protection. P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER/doctor. P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER/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. P337+P313 – If eye irritation persists: Get medical advice/attention. P331 – Do NOT induce vomiting. P332+P313 – If skin irritation occurs: get medical advice/attention. P362 + P364 – Take off contaminated clothing and was before reuse.P405 – Store locked up. P410+P412 – Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. P501 – Dispose of contents/container to a licensed treatment, storage or disposal facility (TSDF).</p>	 
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## 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	PEL	STEL	IDLH		
PETROLEUM DISTILLATES, HYDROTREATED, LIGHT	64742-47-8	OA5504000	265-149-8	30-60	(5)	NA	NF	NF	NF	(5)	NA	NA	MIST (1200) CEFC HSPA	
	Asp. Tox.1; Skin Sens. 1B; Eye Irrit. 2B; Acute Aq. Tox. 3; H305, H317, H320, H402													
HEPTANE	142-82-5	MI7700000	205-563-8	10-30	400	500	400	1640	NF	500	NA	750		
	Flam. Liq. 2; Skin Irrit. 2; STOT-SE 3; Asp. 1; Aquatic Acute 1; Aquatic Chronic 2; H225, H304, H315, H336, H410													
ACETONE	67-64-1	AL3150000	200-662-2	5.0-15.0	1800	NA	1185	2375	NF	2400	NA	2500		
	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3, H225, H319, H336													
CARBON DIOXIDE	124-38-9	FF6400000	204-696-9	1.0-5.0	5000	30000	5000	9000	NF	5000	30000	40000		
	Liq. Gas.; H280													

## 4. FIRST AID MEASURES

4.1	First Aid:	<p><u>Ingestion:</u> 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><u>Eyes:</u> Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes lifting upper and lower lids, occasionally.</p> <p><u>Skin:</u> Wash thoroughly with soap and water. In case of contact, immediately flush skin with plenty of water for at least 15 minutes.</p> <p><u>Inhalation:</u> Remove victim to fresh air at once. If breathing difficult, administer oxygen. If breathing stops give artificial respiration. Keep person warm, quiet and get medical attention.</p>
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SDS Revision: 1.0

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## 4. FIRST AID MEASURES

4.2	Effects of Exposure:	<p><u>Ingestion:</u> If product is swallowed, may cause nausea, temporary gastrointestinal irritation. vomiting and/or diarrhea.</p> <p><u>Eyes:</u> Moderately irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation and watering.</p> <p><u>Skin:</u> May be irritating to skin. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some sensitive individuals.</p> <p><u>Inhalation:</u> Coughing, wheezing, shortness of breath, impaired pulmonary function. Irritation or soreness in throat, nose and respiratory tract.</p>															
4.3	Symptoms of Overexposure:	<p><u>Ingestion:</u> If product is swallowed, may cause gastrointestinal disturbance.</p> <p><u>Eyes:</u> Exposure may cause eye irritation. Symptoms of overexposure may include redness, itching, irritation and watering.</p> <p><u>Skin:</u> May be irritating to skin. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some sensitive individuals.</p> <p><u>Inhalation:</u> Coughing, wheezing, shortness of breath, impaired pulmonary function. Irritation or soreness in throat, nose and respiratory tract. Additionally, high concentrations of vapors can cause drowsiness, dizziness, headaches and nausea. Frostbite like effect to skin.</p>															
4.4	Acute Health Effects:	Non-irritating when used as directed. Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of dust can cause coughing, wheezing, shortness of breath, impaired pulmonary function. Irritation or soreness in throat, nose and respiratory tract.															
4.5	Chronic Health Effects:	Non-irritating when used as directed. Possible allergic dermatitis in some sensitive individuals.															
4.6	Target Organs:	Eyes, Skin															
4.7	Medical Conditions Aggravated by Exposure:	Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin) or impaired kidney function may be more susceptible to the effects of this substance.															
		<table border="1"> <tr><td colspan="2"><b>HEALTH</b></td><td><b>1</b></td></tr> <tr><td colspan="2"><b>FLAMMABILITY</b></td><td><b>2</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>1</b>	<b>FLAMMABILITY</b>		<b>2</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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## 5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	Level 2 Aerosol (NFPA 30B). Aerosols may burst at temperatures above 120 °F. Cool uninvolved containers to prevent possible bursting. Aerosols may be projectile hazards when bursting. If aerosols are bursting, stay clear until bursting is complete. If involved in a fire, this product may decompose at high temperatures to form toxic gases (e.g., CO, CO <sub>x</sub> , hydrocarbons).	
5.2	Extinguishing Methods:	CO <sub>2</sub> , Dry Chemical, Alcohol foam, Dry Chemical. Use water spray to cool containers.	
5.3	Firefighting Procedures:	Keep containers cool until well after the fire is out. Fight fires as for surrounding materials. 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 personal. Fight fire upwind. Avoid spraying water directly into storage containers because of danger of boil-over. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.	

## 6. ACCIDENTAL RELEASE MEASURES

6.1	Spills:	<p>Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment.</p> <p>For <u>small spills</u> (e.g., &lt; 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows). 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 product 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 & STORAGE INFORMATION

7.1	Work & Hygiene Practices:	Do not eat, drink or smoke when handling this product. Handle as to avoid puncturing container(s). Wash unintentional residues with soap and warm water. Keep tightly closed when not in use. Avoid contact with skin and clothing.
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. Avoid temperatures above 120 °F. Keep away from incompatible substances. Protect containers from physical damage. Avoid breathing vapor.
7.3	Special Precautions:	Spilled material may present a slipping hazard if left unattended. Clean all spills promptly. Empty containers may contain product residues. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

## 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1	Exposure Limits: ppm (mg/m <sup>3</sup> )	CHEMICAL NAME(S)	ACGIH		NOHSC			OSHA			OTHER
			TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH	
		PETROLEUM DISTILLATES	(5)	NA	NF	NF	NF	(5)	NA	NA	MIST (1200)
		HEPTANE	400	500	400	1640	NF	500	NA	750	
		ACETONE	1800	NA	1185	2375	NF	2400	NA	2500	
		CARBON DIOXIDE	5000	30000	5000	9000	NF	5000	30000	40000	
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:	No special respiratory protection is required under typical circumstances of use or handling. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134, or applicable U.S. state regulations, or the appropriate standards of Canada, its provinces, E.C. member states, or Australia.									
8.4	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.									
											
8.5	Hand Protection:	Use gloves constructed of chemical resistant materials such as neoprene or heavy nitrile rubber if frequent or prolonged contact is expected. Use heat-protective gloves when handling product at elevated temperatures.									
											
8.6	Body Protection:	No apron required when handling small quantities. When handling large quantities (e.g., ≥ 1 gallon), eye wash stations and deluge showers should be available. Upon completion of work activities involving large quantities of this product, wash any exposed areas thoroughly with soap and water.									

## 9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Aerosol. Colorless to pale yellow liquid.
9.2	Odor:	Mild odor
9.3	Odor Threshold:	NA
9.4	pH:	NA
9.5	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	NA
9.7	Flashpoint:	NA
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	5.08
9.11	Relative Density:	NA
9.12	Solubility:	Negligible
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:	Stable under normal conditions; unstable with heat or contamination.
10.2	Hazardous Decomposition Products:	Change in color signifies exposure to ultraviolet light or exceeding shelf life. Will not degrade to unstable products. Discard solution.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Open flames, sparks, high heat, incompatible substances and direct sunlight.
10.5	Incompatible Substances:	Avoid extreme heat and ignition sources. Store away from oxidizers.

## 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 toxicological data. Toxicology data for some of the components in this mixture, found in scientific literature, are presented below: <b>Petroleum Distillates:</b> LD <sub>50</sub> (oral, rat) > 5000 mg/kg; LD <sub>50</sub> (dermal, rabbit) > 5000 mg/kg			
11.3	Acute Toxicity:	Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can cause drowsiness, dizziness, headaches and nausea.			
11.4	Chronic Toxicity:	This material may aggravate any pre-existing skin condition (e.g., dermatitis).			
11.5	Suspected Carcinogen:	No.			

## 11. TOXICOLOGICAL INFORMATION – cont'd

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 cause teratogenic effects in humans.
	Reproductive Toxicity:	This product is not reported to cause reproductive effects in humans.
11.7	Irritancy of Product:	The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure.
11.8	Biological Exposure Indices:	NE
11.9	Physician Recommendations:	Treat symptomatically.

## 12. ECOLOGICAL INFORMATION

12.1	Environmental Stability:	There is 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:	This material should be kept out of sewage and drainage systems and all bodies of water. Releases of large volumes of this product are expected to be harmful or fatal to overexposed aquatic life.

## 13. DISPOSAL CONSIDERATIONS

13.1	Waste Disposal:	Products covered by this SDS, in their original form, when disposed as waste, are considered non hazardous waste according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state and federal regulations. Dispose of in accordance with federal, state and local regulations.
13.2	Special Considerations:	Contact the federal, state or provincial environmental authority to determine suitability for recycling and or proper disposal requirements.

## 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):	CONSUMER COMMODITY, ORM-D (IP VOL ≤ 1.0 L) – until 12/31/20 UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	
14.2	IATA (AIR):	CONSUMER COMMODITY, 9, ID8000 (IP VOL ≤ 0.5 L) UN1950, AEROSOLS, FLAMMABLE, 2.1 (IP VOL > 1.0 L)	 or 
14.3	IMDG (OCN):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	
14.4	TDGR (Canadian GND):	UN1950, AEROSOLS, FLAMMABLE, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	
14.5	ADR/RID (EU):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	
14.6	SCT (MEXICO):	UN1950, AEROSOLS, 2.1 (CANT. LTDA., IP VOL ≤ 1.0 L)	
14.7	ADGR (AUS):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	

## 15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product does not contain any substances subject to SARA Title III, Section 313 reporting 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:	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 B5, D2B (Flammable Aerosol, Other Toxic Effects).	

## 15. REGULATORY INFORMATION – cont'd

15.7	State Regulatory Information:	<p><u>Heptane</u> is found on the following state criteria list: Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Minnesota Hazardous Substances List (MN), Pennsylvania Right-to-Know List (PA), and Washington Permissible Exposures List (WA).</p> <p><u>Acetone</u> is found on the following state criteria lists: CA, DE, MA, MN, NJ, NY, PA, WA, and WI.</p> <p><u>Carbon Dioxide</u> is found on the following state criteria list: FL, MA, MN, PA, and WA.</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 (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:	<p>The primary components of this product are not listed in Annex I of EU Directive 67/548/EEC:</p> <p><u>Petroleum Distillates</u>: Harmful (Xn). <u>Risk Phrases</u> (R): 65 – Harmful may cause lung damage if swallowed. <u>Safety Phrases</u> (S): 2-23-24-62 - Keep away from children. Do not breathe fumes/spray. Avoid contact with skin. If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label where possible.</p> <p><u>Heptane</u>: Flammable, Harmful (F, Xn). <u>Risk Phrases</u> (R): 11-36-66-67 – Highly flammable. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapors may cause dizziness or drowsiness. <u>Safety Phrases</u> (S): (2-)9-16-26-46 – Keep out of the reach of children. Keep container in a well-ventilated place. Keep away from sources of ignition – No smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed, seek medical advice immediately and show this container or label.</p> <p><u>Acetone</u>: Highly Flammable (F+). <u>Risk Phrases</u> (R): 11-36-66-67 – Highly flammable. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapors may cause drowsiness and dizziness. <u>Safety Phrases</u> (S): 9-16-23-33 - Keep container in a well-ventilated place. Keep away from sources of ignition - No smoking. Do not breathe gas, fumes, vapor or spray. Take precautionary measures against static discharges.</p>	 

## 16. OTHER INFORMATION

16.1	Other Information:	<p><b>WARNING! FLAMMABLE AEROSOL. PRESSURIZED CONTAINER; MAY BURST IF HEATED. MAY BE HARMFUL IF SWALLOWED AND ENTERS AIRWAYS.</b> Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking. Do not spray on open flames or other ignition source. Do not pierce or burn, even after use. <b>IF SWALLOWED:</b> Immediately call a POISON CENTER/doctor. <b>IF SWALLOWED:</b> Immediately call a POISON CENTER/doctor/physician. Do NOT induce vomiting. If skin irritation occurs: get medical advice/attention. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C (122 °F). Overexposure may cause dizziness and loss of concentration. At higher levels, CNS depression and cardiac arrhythmia may result from exposure. Vapors displace air and can cause asphyxiation in confined spaces. <b>KEEP LOCKED UP AND OUT OF REACH OF CHILDREN.</b></p>	
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 & CAIG Laboratories, Inc.'s knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.	
16.4	Prepared for:	<p><b>CAIG Laboratories, Inc.</b> 12200 Thatcher Court Poway, CA 92064-6876 Tel: +1 (800) CAIG-123 (244-4123) Fax: +1 (858) 486-8398 fax <a href="http://www.caig.com/">http://www.caig.com/</a></p>	
16.5	Prepared by:	<p><b>ShipMate, Inc.</b> P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 <a href="http://www.shipmate.com">http://www.shipmate.com</a></p>	

## DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

### GENERAL INFORMATION:

<b>CAS No.</b>	Chemical Abstract Service Number
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### EXPOSURE LIMITS IN AIR:

<b>ACGIH</b>	American Conference on Governmental Industrial Hygienists
<b>C</b>	Ceiling Limit
<b>ES</b>	Exposure Standard (Australia)
<b>IDLH</b>	Immediately Dangerous to Life and Health
<b>OSHA</b>	U.S. Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>STEL</b>	Short-Term Exposure Limit
<b>TLV</b>	Threshold Limit Value
<b>TWA</b>	Time Weighted Average

### 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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### HMIS-III HEALTH, FLAMMABILITY & REACTIVITY 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>HEALTH</b>
<b>FLAMMABILITY</b>
<b>PHYSICAL HAZARDS</b>
<b>PERSONAL PROTECTION</b>

### PERSONAL PROTECTION RATINGS:

<b>A</b>		<b>G</b>	
<b>B</b>		<b>H</b>	
<b>C</b>		<b>I</b>	
<b>D</b>		<b>J</b>	
<b>E</b>		<b>K</b>	
<b>F</b>		<b>X</b>	Consult your supervisor or SOPs for special handling directions.

Safety Glasses	Splash Goggles	Face Shield & Protective Eyewear	Gloves
Boots	Synthetic Apron	Protective Clothing & Full Suit	Dust Respirator
Full Face Respirator	Dust & Vapor Half-Mask Respirator	Full Face Respirator	Airline Hood/Mask or SCBA

### OTHER STANDARD ABBREVIATIONS:

<b>ML</b>	Maximum Limit
<b>mg/m3</b>	milligrams per cubic meter
<b>NA</b>	Not Available
<b>ND</b>	Not Determined
<b>NE</b>	Not Established
<b>NF</b>	Not Found
<b>NR</b>	No Results
<b>ppm</b>	parts per million
<b>SCBA</b>	Self-Contained Breathing Apparatus

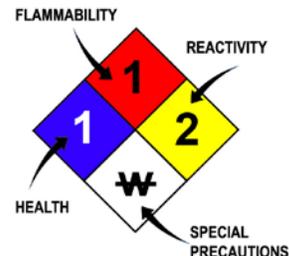
### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

### 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>10</sub>, LD<sub>10</sub>, &amp; LD<sub>01</sub> or TC, TC<sub>01</sub>, LC<sub>10</sub>, &amp; LC<sub>01</sub></b>	Lowest dose (or concentration) to cause lethal or toxic effects
<b>IARC</b>	International Agency for Research on Cancer
<b>NTP</b>	National Toxicology Program
<b>RTECS</b>	Registry of Toxic Effects of Chemical Substances
<b>BCF</b>	Bioconcentration Factor
<b>TL<sub>m</sub></b>	Median threshold limit
<b>log K<sub>ow</sub> or log K<sub>oc</sub></b>	Coefficient of Oil/Water Distribution

### REGULATORY INFORMATION:

<b>WHMIS</b>	Canadian Workplace Hazardous Material Information System
<b>DOT</b>	U.S. Department of Transportation
<b>TC</b>	Transport Canada
<b>EPA</b>	U.S. Environmental Protection Agency
<b>DSL</b>	Canadian Domestic Substance List
<b>NOHSC</b>	National Occupational Health and Safety Commission (Australia)
<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)
<b>HMIS-III</b>	National Paint & Coatings Association Hazardous Materials Identification System

### 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