



# SAFETY DATA SHEET

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision: 1.0 SDS Revision Date: 2/22/2021

Classification of the Hazardous Chemical (in accordance with WHS Regulation)

## 1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	<b>ProOne® RUSTPRO RUST AND CORROSION INHIBITOR</b>
1.2	Chemical Name:	Mixture
1.3	Synonyms:	NA
1.4	Trade Names:	ProOne® RustPro Rust and Corrosion Inhibitor
1.5	Product Uses & Restrictions:	Rust Preventive
1.6	Distributor's Name:	Pro-1-One Lubrication Australia PTY LTD
1.7	Distributor's Address:	6/165 Rookwood Rd, Yagoona NSW 2199, Sydney Australia
1.8	Emergency Phone:	<b>Poisons Information Centre: Australia: 13 11 26 New Zealand: 0800 764 766</b>
1.9	Business Phone / Fax:	Tel: +61 1300 00 7761

## 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).  <b>DANGER! MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES EYE IRRITATION.</b>  <u>Classification:</u> Asp. Tox. 1, Skin Sens. 1B, Eye Irrit. 2B  <u>Hazard Statements (H):</u> H304 – May be fatal if swallowed and enters airways. H317 – May cause an allergic skin reaction. H320 – Causes eye irritation.  <u>Precautionary Statements (P):</u> P261 – Avoid breathing fume/mist/vapors/spray. P272 – Contaminated work clothing should not be allowed out of the workplace. P264 – Wash thoroughly with soap and water after handling. P280 – Wear protective gloves/eye protection/face protection. P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER/doctor. P331 – Do NOT induce vomiting. P302+P352 – IF ON SKIN (OR HAIR): Take off immediately all contaminated clothing. Rinse with water or shower. P333 + P313 – If skin irritation or rash occurs: get medical advice/attention. P321 – Specific treatment: see Section 4 of this Safety Data Sheet. P362+ P364 – Take off contaminated clothing and was before reuse. 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. P403+P235 – Store in a well-ventilated place. Keep cool. P405 – Store locked up. 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				
					ppm	ppm	ppm	ppm	ppm	ppm	ppm			
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC *	64742-55-8	NA	265-158-7	60-100	(5)	(10)	(5)	(10)	NF	(5)	NA	NA	OIL MIST	
	Asp. Tox. 1; H304													
PROPRIETARY MIXTURE	NA	NA	NA	10-25	NA	NA	NF	NF	NF	NA	NA	NA		
	Skin Sens. 1B; H317													
SEVERELY HYDROTREATED NAPHTHENIC PETROLEUM OIL *	64742-52-5	NA	265-155-0	1-5	(5)	(10)	(5)	NA	NA	(5)	NA	NA	OIL MIST	
	Asp. Tox. 1; H304													
CALCIUM SULFONATE	61789-86-4	NA	263-093-9	20-30	NA	NA	NF	NF	NF	NA	NA	NA		
	Skin Sens. 1; Eye Irrit. 2; H317, H319													

\* contains ≤ 3.0% DIMETHYL SULFOXIDE (DMSO)

## 4. FIRST AID MEASURES

4.1	First Aid:	<p><u>Ingestion:</u> <b>DO NOT INDUCE VOMITING.</b> 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.</p> <p><u>Eyes:</u> If product gets in the eyes, flush eyes thoroughly with copious amounts of water for at least 15 minutes, holding eyelid(s) open to ensure complete flushing. If the eyes or face become swollen during or following use, consult a physician or emergency room immediately.</p> <p><u>Skin:</u> 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.</p> <p><u>Inhalation:</u> Remove victim to fresh air at once. If breathing is difficult, administer supplemental oxygen and seek immediate medical attention. If breathing stops, perform artificial respiration.</p>
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## 4. FIRST AID MEASURES – cont'd

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> May cause transient mild-eye irritation with short-term contact with liquid, spray or mist.</p> <p><b>Skin:</b> This product can cause mild, transient skin irritation with short-term exposure. This product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure.</p> <p><b>Inhalation:</b> No significant adverse health effects are expected to occur upon short-term exposure to this product. Aspiration of liquid into the lungs can cause severe lung damage or death. Drowsiness, dizziness, headaches and nausea.</p>											
4.3	Symptoms of Overexposure:	<p><b>Eyes:</b> Overexposure in eyes may cause redness, itching and watering.</p> <p><b>Skin:</b> Symptoms of skin overexposure may include redness, itching, and irritation of affected areas The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure.</p>											
4.4	Acute Health Effects:	Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can cause drowsiness, dizziness, headaches and nausea.											
4.5	Chronic Health Effects:	Contains a petroleum-based mineral oil. Prolonged or repeated skin contact can cause mild irritation and inflammation characterized by drying, cracking, (dermatitis) or oil acne. Repeated or prolonged inhalation of petroleum-based mineral oil mists at concentrations above applicable workplace exposure levels can cause respiratory irritation or other pulmonary effects.											
4.6	Target Organs:	Eyes, Skin & Respiratory System											
4.7	Medical Conditions Aggravated by Exposure:	Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin, and respiratory system).	<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>1</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 style="background-color: #000000; color: white;"><b>PROTECTIVE EQUIPMENT</b></td> <td style="text-align: center;"><b>B</b></td> </tr> <tr> <td><b>EYES</b></td> <td><b>SKIN</b></td> </tr> </table>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARDS</b>	<b>0</b>	<b>PROTECTIVE EQUIPMENT</b>	<b>B</b>	<b>EYES</b>	<b>SKIN</b>
<b>HEALTH</b>	<b>1</b>												
<b>FLAMMABILITY</b>	<b>1</b>												
<b>PHYSICAL HAZARDS</b>	<b>0</b>												
<b>PROTECTIVE EQUIPMENT</b>	<b>B</b>												
<b>EYES</b>	<b>SKIN</b>												

## 5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	This material can burn but will not readily ignite. This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point. Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and trace oxides of sulfur, phosphorus and nitrogen. Also, depending upon the conditions of use, low concentrations of hydrogen sulfide can be released.	
5.2	Extinguishing Methods:	Dry Chemical, Foam, Carbon Dioxide, Water Fog.	
5.3	Firefighting Procedures:	Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personal. 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:	Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment. For <u>small spills</u> (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. 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 drains, municipal sewers and open bodies of water.
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## 7. HANDLING & STORAGE INFORMATION

7.1	Work & Hygiene Practices:	Use normal hygiene practices. Avoid breathing vapors. Avoid direct skin contact. Wash hands thoroughly after using this product and before eating, drinking, or smoking.
7.2	Storage & Handling:	Use and store in a cool, dry, well-ventilated area. Keep away from excessive heat, open flames, sparks, and other possible sources of ignition. Do not store in unmarked containers or storage devices.
7.3	Special Precautions:	Empty containers may contain product residue. Do not pressurize, cut, heat or weld empty containers. Do not reuse empty containers without commercial cleaning or reconditioning. Keep container tightly closed when not in use. Do not store at temperatures above 120°F (49°C) Store away from strong oxidizers.

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## 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
		DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC *	(5)	(10)	(5)	(10)	NF	(5)	NA	NA	OIL MIST
		SEVERELY HYDROTREATED NAPHTHENIC PETROLEUM OIL *	(5)	(10)	(5)	NA	NA	(5)	NA	NA	OIL MIST
8.2	Ventilation & Engineering Controls:	The use of mechanical dilution ventilation is recommended to maintain airborne concentrations below the recommended occupational exposure limits, whenever this material is used in a confined space, is heated above normal temperatures (up to 38 °C) or is agitated.									
8.3	Respiratory Protection:	Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.									
8.4	Eye Protection:	Safety glasses equipped with side shields should be adequate protection under most conditions of use. Wear goggles and/or face shield if splashing or spraying is anticipated. Wear goggles and face shield if material is heated above 125 °F (51 °C). Have suitable eye wash water available.									
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. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the E.C. member states.									
8.6	Body Protection:	Avoid prolonged and/or repeated skin contact. Use clean and impervious protective clothing (e.g., neoprene or Tyvek®) if splashing or spraying conditions are present. Protective clothing should include long-sleeves, apron, boots and additional facial protection. Remove oil contaminated clothing. Launder oil contaminated clothing before reusing. Contaminated leather goods should be removed promptly and discarded.									

## 9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Dark brown, thick liquid
9.2	Odor:	Petroleum 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:	> 170 °C (> 338 °F), PMCC
9.8	Upper/Lower Flammability Limits:	LEL: 0.9% / UEL: 7.0%
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	>1
9.11	Relative Density:	0.86-0.89 @ 15.6 °C (60 °F), Bulk Density: 7.35 lb/gl
9.12	Solubility:	Insoluble
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:	Evaporation Rate: < 1

## 10. STABILITY & REACTIVITY

10.1	Stability:	Stable at normal temperatures.
10.2	Hazardous Decomposition Products:	Fumes, smoke, oxides of carbon and nitrogen.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Open flames, sparks, high heat, and close proximity to incompatible substances.
10.5	Incompatible Substances:	Strong oxidizing agents.



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## 11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation: NO	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: Based on animal testing from similar materials & products, the acute toxicity of this product is expected to be: <u>Distillates, Petroleum, Hydrotreated, Light Paraffinic</u> – LD <sub>50</sub> (oral, rat) > 5,000 mg/kg; LD <sub>50</sub> (dermal, rabbit) > 2,000 mg/kg.		
11.3	Acute Toxicity:	Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipid granuloma formation and lipid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.		
11.4	Chronic Toxicity:	NA		
11.5	Suspected Carcinogen:	This product contains a severely hydrotreated distillate with less than 3 % DMSO extract as measured by IP 346 and is, therefore, it is not considered a carcinogen.		
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:	This product is believed to be stable. Engineering controls should be put in place to prevent release to the environment.
12.2	Effects on Plants & Animals:	No evidence is currently available on this product's effects on plants or animals.
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, provincial 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 or are otherwise exempt.
15.4	CERCLA Reportable Quantity (RQ):	NA
15.5	Other Federal Requirements:	None of the ingredients are listed as Hazardous Air Pollutants (HAPs). None of the ingredients are listed as Toxic Pollutants under the Clean Water Act (CWA). None of the ingredients are listed as Priority Pollutants under the Clean Water Act (CWA). This product does not contain any Class 1 or Class 2 ozone depletors.
15.6	Other Canadian Regulations:	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 D2B (Other Toxic Effects) 
15.7	State Regulatory Information:	No 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).



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SDS Revision: 1.0



SDS Revision Date: 2/22/2021

Classification of the Hazardous Chemical (in accordance with WHS Regulation)

## 15. REGULATORY INFORMATION – cont'd

15.8	Other Requirements:	The primary components of this product are not listed in Annex I of EU Directive 67/548/EEC: <u>Distillates (Petroleum), Paraffinic</u> : Harmful (Xn). <u>Risk Phrases (R)</u> : 65 – Harmful: may cause lung damage if swallowed. <u>Safety Phrases (S)</u> : 53-45 – Avoid exposure – obtain special instructions before use. In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).	
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## 16. OTHER INFORMATION

16.1	Other Information:	<b>DANGER! MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES EYE IRRITATION.</b> Avoid breathing fume/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wash thoroughly with soap and water after handling. Wear protective gloves/eye protection/face protection. <b>IF SWALLOWED:</b> Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. <b>IF ON SKIN (OR HAIR):</b> Take off immediately all contaminated clothing. Rinse with water or shower. If skin irritation or rash occurs: get medical advice/attention. Specific treatment: see Section 4 of this Safety Data Sheet. Take off contaminated clothing and was before reuse. <b>IF IN EYES:</b> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Store in a well-ventilated place. Keep cool. Store locked up. <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 & ProOne, 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:	<b>Pro-1-One Lubricant Australia PTY LTD</b> 6/165 Rookwood Rd, Yagoona NSW 2199, Sydney, Australia Tel: +61 1300 00 7761 e-mail: info@pro-one.net.au http://www.pro-one.net.au	
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 http://www.shipmate.com	

## 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:

0	Minimal Hazard	<div style="background-color: blue; color: white; padding: 2px;">HEALTH</div> <div style="background-color: red; color: white; padding: 2px;">FLAMMABILITY</div> <div style="background-color: yellow; color: black; padding: 2px;">PHYSICAL HAZARDS</div> <div style="background-color: black; color: white; padding: 2px;">PERSONAL PROTECTION</div>
1	Slight Hazard	
2	Moderate Hazard	
3	Severe Hazard	
4	Extreme Hazard	

### 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

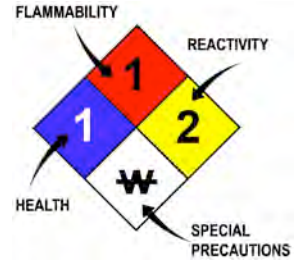
### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

#### 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>10</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>50</sub> or TC, TC<sub>0</sub>, LC<sub>10</sub>, &amp; LC<sub>0</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