



SAFETY DATA SHEET

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.2 SDS Revision Date: 10/25/2018

1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	GENUINE OIL™ GUN STOCK FINISH	NZ DISTRIBUTOR Steve's Wholesale Ltd. Units 5 – 7 / 408 The Esplanade Island Bay Wellington 6023 team@steveswholesale.nz
1.2	Chemical Name:	Mixture	
1.3	Synonyms:	23225	
1.4	Trade Names:	Genuine Oil™ Gun Stock Finish	Emergency Contact: Steve Collings
1.5	Product Use:	Gun Stock Finish	0800 303 303
1.6	Distributor's Name:	Birchwood Casey, LLC	0274 905 708
1.7	Distributor's Address:	3260 Winpark Drive, New Hope, MN., 55427 USA	Poison Control 0800 POISON (0800 764 766)
1.8	Emergency Phone:	ChemTrec +1 (800) 424-9300 / +1 (703) 527-3887 or Poison Control Center +1 (866) 291-7152	
1.9	Business Phone / Fax:	+1 (952) 388-6717	

2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	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). DANGER! MAY BE TOXIC IF SWALLOWED AND ENTERS AIRWAYS. CAUSES MILD SKIN IRRITATION. COMBUSTIBLE LIQUID. COMBUSTIBLE LIQUID. Classification: Asp. Tox.1, Skin Irrit. 3, Flam. Liq. 4	
2.2	Label Elements:	<p>Hazard Statements (H): H304 – May be toxic if swallowed and enters airways. H316 – Causes mild skin irritation. H227 – Combustible liquid.</p> <p>Precautionary Statements (P): P201 – Obtain special instructions before use. P202 – Do not handle until all safety precautions have been read and understood. P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 – Wear protective gloves/protective clothing/ eye protection/face protection. P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER/doctor. P331 – Do not induce vomiting. P332+P313 – If skin irritation occurs: Get medical advice/attention. P370+P378 – In case of fire use dry chemical, foam, carbon dioxide, water fog to extinguish. P403 – Store in a well-ventilated place. P405 – Store locked up. P501 – Dispose of contents/container through licensed treatment, storage or disposal facility.</p>	
2.3	Other Warnings:	In the event of an exposure or medical inquiry involving this product, please contact a physician or local poison control center, who may seek advice from the U.S. manufacturer, and show them this SDS. KEEP OUT OF REACH OF CHILDREN.	

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	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH		
NAPHTHA, PETROLEUM HYDROTREATED HEAVY *	64742-48-9	NA	265-150-3	40-60	NA	(5)	NF	NF	NF	NA	(5)	(10)	OIL MIST	
TUNG OIL	8001-20-5	NA	232-272-3	40-60	NA	NA	NF	NF	NF	NA	NA	NA		

* contains less than 3% Dimethyl Sulfoxide (DMSO)

4. FIRST AID MEASURES

4.1	First Aid:	<p>Ingestion: DO NOT INDUCE VOMITING. Contact a 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>Eyes: 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>Skin: Remove contaminated clothing and wash affected areas with soap and water. If discomfort persists and/or the skin reaction worsens, contact a physician immediately. Do not wear contaminated clothing until after it has been properly laundered.</p> <p>Inhalation: Remove victim to fresh air at once. Under extreme conditions, if breathing stops, perform artificial respiration. Seek immediate medical attention.</p>
4.2	Effects of Exposure:	<p>Ingestion: Irritation to the gastrointestinal tract. This material can enter the lungs during swallowing or vomiting and cause lung damage.</p> <p>Eyes: Irritation upon direct contact. Symptoms may include stinging, tearing, redness and swelling.</p> <p>Skin: Mildly irritating. Prolonged or repeated skin contact can result in defatting, drying of the skin with symptoms of redness, stinging. May be absorbed through the skin in harmful amounts.</p> <p>Inhalation: Inhalation may cause irritation to the respiratory tract (nose, throat and lungs). Inhalation of high vapor concentrations may cause central nervous system effects, and symptoms such as headache, dizziness, and disorientation.</p>



SAFETY DATA SHEET

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.2 SDS Revision Date: 10/25/2018

4. FIRST AID MEASURES – cont'd

4.3	Symptoms of Overexposure:	<p>Ingestion: Nausea, intestinal discomfort, vomiting and/or diarrhea.</p> <p>Eyes: Overexposure in eyes may cause redness, itching and watering.</p> <p>Skin: 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) in some individuals.</p>															
4.4	Acute Health Effects:	None reported by the manufacturer.															
4.5	Chronic Health Effects:	Eyes, Skin, Lungs, Liver, Kidney, CNS															
4.6	Target Organs:	Pre-Existing Skin, Eye, Respiratory, CNS, Bone-Marrow Disorders, Liver, Kidney Disease.															
4.7	Medical Conditions Aggravated by Exposure:	<table border="1"> <tr><td colspan="2">HEALTH</td><td>2</td></tr> <tr><td colspan="2">FLAMMABILITY</td><td>2</td></tr> <tr><td colspan="2">PHYSICAL HAZARDS</td><td>0</td></tr> <tr><td colspan="2">PROTECTIVE EQUIPMENT</td><td>B</td></tr> <tr><td>EYES</td><td>SKIN</td><td></td></tr> </table>	HEALTH		2	FLAMMABILITY		2	PHYSICAL HAZARDS		0	PROTECTIVE EQUIPMENT		B	EYES	SKIN	
HEALTH		2															
FLAMMABILITY		2															
PHYSICAL HAZARDS		0															
PROTECTIVE EQUIPMENT		B															
EYES	SKIN																

5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	WARNING! COMBUSTIBLE LIQUID. Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking. If involved in a fire, this product may decompose at high temperatures to form toxic gases (e.g., CO, CO _x , hydrocarbons). Vapors of this product are heavier than air and may travel to a source of ignition and flash back to a leaking or open container.	
5.2	Extinguishing Methods:	Dry Chemical, Foam, Carbon Dioxide, Water Fog.	
5.3	Firefighting Procedures:	As with any fire, firefighters should wear appropriate protective equipment including a MSHA/NIOSH approved or equivalent self-contained breathing apparatus (SCBA) and protective clothing. Treat as hot oil. Hazardous decomposition products may be released. Thermal degradation may produce oxides of carbon, and/or nitrogen, hydrocarbons and/or derivatives. Fire should be fought from a safe distance. 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. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway.	

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., < 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 <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). Use ONLY non-sparking tools for recovery and cleanup. 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>
-----	---------	--

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. Storage temperature: 32 - 120 °F (0 - 49 °C). Take precautionary measures against static discharge. Store away from incompatible materials (See Section 10).
7.3	Special Precautions:	<p>Caution! This product contains <u>Tung Oil</u> which generates heat as it dries which can cause spontaneous combustion of oily rags, waste and other materials. Immediately after use and before disposal it is recommended to hand wash oily materials thoroughly with water and detergent outside in a bucket and rinse.</p> <p>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. Spilled material may pose a slipping hazard.</p>



SAFETY DATA SHEET

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

SDS Revision: 1.2

SDS Revision Date: 10/25/2018

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1	Exposure Limits: ppm (mg/m ³)	CHEMICAL NAME(S)	ACGIH		NOHSC			OSHA			OTHER
			TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH	
		NAPHTHA, PETROLEUM HYDROTREATED HEAVY	NA	(5)	NF	NF	NF	NA	(5)	(10)	OIL MIST
8.2	Ventilation & Engineering Controls:	Use local or general exhaust ventilation to effectively remove and prevent buildup of vapors or mist generated from the handling of this product. Ensure appropriate decontamination equipment is available (e.g., sink, safety shower, eye-wash station).									
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:	If anticipated that prolonged & repeated skin contact will occur during use of this product, wear latex or rubber gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the E.C. member states.									
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. A chemical resistant apron and/or protective clothing are recommended when handling or using large quantities (e.g., > 5 gallons (18.9 L)) of this product. 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:	Brown liquid
9.2	Odor:	Solvent 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:	68.33 °C (155 °F)
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	NA
9.11	Relative Density:	0.827
9.12	Solubility:	Negligible
9.13	Partition Coefficient (log P _{ow}):	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:	Relatively stable under ambient conditions when stored properly.
10.2	Hazardous Decomposition Products:	If exposed to <u>extremely high temperatures</u> , products of thermal decomposition may include irritating vapors and toxic gases (e.g., metallic oxides, oxides of carbon & nitrogen).
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Exposure or contact to extreme temperatures, incompatible chemicals, strong light sources, sparks, flame.
10.5	Incompatible Substances:	Strong oxidizers, peroxides or strong acids.

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. Based on animal test results for similar products and materials (available from scientific literature), the acute toxicity of this product is expected to be: <u>Mineral Oils</u> – LD ₅₀ (oral, rat) > 5,000 mg/kg; <u>2-Ethylhexanol</u> : LC ₅₀ (inh, rat, 1h): 2.7 mg/L, LD ₅₀ (oral, rat): > 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.		



SAFETY DATA SHEET

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

SDS Revision: 1.2

SDS Revision Date: 10/25/2018

11. TOXICOLOGICAL INFORMATION – cont'd

11.4	Chronic Toxicity:	Prolonged or repeated skin contact can cause mild irritation and inflammation characterized by drying, cracking, (dermatitis) or oil acne.
11.5	Suspected Carcinogen:	This product contains a hydrotreated mineral oil with less than 3% DMSO extract as measured by IP 346 and is not considered a carcinogen. This product does not contain any chemicals known to the State of California to cause cancer or other reproductive harm. For more information go to www.P65Warnings.ca.gov .
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:	Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.
12.2	Effects on Plants & Animals:	There are no specific data available for this product. An environmental fate analysis has not been conducted on this specific product. However, plants and animals may experience harmful or fatal effects when coated with petroleum-based products. □
12.3	Effects on Aquatic Life:	Petroleum-based (mineral) lube oils will normally float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway can result in a loss of marine life or create an anaerobic environment. This material contains phosphorus which is a controlled element for disposal in effluent waters in most sections of North America. Phosphorus is known to enhance the formation of algae. Severe algae growth can reduce oxygen content in the water possibly below levels necessary to support marine life.

13. DISPOSAL CONSIDERATIONS

13.1	Waste Disposal:	Review current local, state and federal laws, codes, statutes and regulations to determine current status and appropriate disposal method for the ingredients listed in Section 3. Any disposal practice must be in compliance with local, state, and federal laws and regulations. Contact the appropriate agency for specific information. Disposal of hazardous waste must be through by a licensed treatment, storage or disposal facility (TSDF).
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):	NOT REGULATED PER 49 CFR §173.150(f)(2)	
14.2	IATA (AIR):	ID8000, CONSUMER COMMODITY, 9 (IP VOL ≤ 0.5 L) UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III (LTD QTY, IP VOL ≤ 1.0 L)	
14.3	IMDG (OCN):	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III (LTD QTY, IP VOL ≤ 5.0 L)	
14.4	TDGR (Canadian GND):	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III (LTD QTY, IP VOL ≤ 5.0 L)	
14.5	ADR/RID (EU):	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III (LTD QTY, IP VOL ≤ 5.0 L)	
14.6	SCT (MEXICO):	UN1268, DESTILADOS DE PETROLEO, N.E.P., 3, III (CANTIDAD LIMITADA, IP VOL ≤ 5.0 L)	
14.7	ADGR (AUS):	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III (LTD QTY, IP VOL ≤ 5.0 L)	

15. REGULATORY INFORMATION

HSR002657

15.1	SARA Reporting Requirements:	This product does not contain any substances subject to SARA Title III, Section 313 reporting requirements.
15.2	SARA TPQ:	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:	NA
15.5	Other Federal Requirements:	NA



SAFETY DATA SHEET

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

SDS Revision: 1.2

SDS Revision Date: 10/25/2018

15. REGULATORY INFORMATION – cont'd

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 B3, D2B (Combustible, Other Toxic Effects).	 
15.7	State Regulatory Information:	<u>Petrolatum distillates</u> is found on the following state criteria list: Pennsylvania Right to Know (PA), and New Jersey Right to Know (NJ). 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).	
15.8	Other Requirements:	This product does not contain any chemicals known to the State of California to cause cancer or other reproductive harm. For more information go to www.P65Warnings.ca.gov	

16. OTHER INFORMATION

SW revised 30.12.2020

16.1	Other Information:	DANGER! MAY BE TOXIC IF SWALLOWED AND ENTERS AIRWAYS. CAUSES MILD SKIN IRRITATION. COMBUSTIBLE LIQUID. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/ eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do not induce vomiting. If skin irritation occurs: Get medical advice/attention. In case of fire use dry chemical, foam, carbon dioxide, water fog to extinguish. Store locked up. Store in a well-ventilated place. Dispose of contents/container through licensed treatment, storage or disposal facility. KEEP LOCKED UP AND OUT OF REACH OF CHILDREN.	
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.	
16.3	Disclaimer:	This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & Birchwood Casey, LLC 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:	Birchwood Casey, LLC 3260 Winpark Drive New Hope, MN 55427 USA Tel: +1 (952) 388-6717 Email: customerservice@birchwoodcasey.com http://www.birchwoodCasey.com	
16.5	Prepared by:	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	 <i>Dangerous Goods Training & Consulting</i>



SAFETY DATA SHEET

Page 6 of 6
BC-028

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

SDS Revision: 1.2

SDS Revision Date: 10/25/2018

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

EXPOSURE LIMITS IN AIR:

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

FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.
-----	--

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard
1	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	Protective 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:

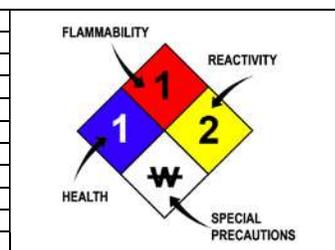
Carc	Carcinogenic
Irrit	Irritant
NA	Not Available
NR	No Results
ND	Not Determined
NE	Not Established
NF	Not Found
SCBA	Self-Contained Breathing Apparatus
Sens	Sensitization
STOT RE	Specific Target Organ Toxicity – Repeat Exposure
STOT SE	Specific Target Organ Toxicity – Single Exposure

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 ₀ or TC, TC ₀ , LC ₁₀ , & LC ₀	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

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