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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.1 SDS Revision Date: 3/20/2017

		<u> </u>	PRODUC	T & COM	<u>IPANY</u>	IDEN.	<u>TIFI</u>	CA1	<b>TION</b>				
1.1	Product Name:	METAL F	OLISH/C	LEANSE	R								
1.2	Chemical Name:	Aqueous Solu	tion		200.000								
1.3	Synonyms:	45118, 45106											
1.4	Trade Names:	Metal Polish/C											
1.5	Product Use:	Metal Polish/C	A FE CHO LINE OF TAX LINE OF										
1.6	Distributor's Name:	Precision Bran	nd Products. In	C.									
1.7	Distributor's Address:		Street, Downer		515 USA								
1.8	Emergency Phone:		+1 (800) 424-			007 or E	Paica	n Co	ntrol C	ontor	-14 (OF	E) 204 /	1742
1.9	Business Phone / Fax:				03) 321-0	0001 01 1	0150	II CO	iitioi C	enter	T1 (00	3) 201-	1742
1.9	Business Priorie / Fax.	+1 (630) 969-	7200 / +1 (630	) 969-0310									
			2. H/	AZARDS	IDENT	IFICA	TIOI	N					
2.1	Hazard Identification:	This product is	s classified as	24 14 77620 CO 2011 PRO 27 11 PRO 27	Description of the control of		9.00	2012/01/01	goods :	accord	lina to th	e classif	ication criteria
		[NOHSC: 108 WARNING! IRRITATION.	8 (2004)] and A MAY BE HA	ADG Code (Au ARMFUL IN	ıstralia). CONTAC	T WITH	10 KONTANTA	Section to the control	u <del>-</del> somoom -		nerse and one		
2.2	Label Elements:		<u>nents</u> (H): H31 es eye irritation		rmful in c	ontact wit	h skin	. H31	5 – Cau	ses sk	in irritati	on.	
		Precautionary Statements (P): P261 – Avoid breathing mist/sprays. P272 – Contaminated work clothing should not be allowed out of the workplace. P280 – Wear protective gloves/eye protection. P302+P352 – IF ON SKIN: Wash with plenty of soap and water. P333+P313 – If skin irritation or rash occurs: Get medical advice/attention. P321 – Specific treatment – see section 4 of this Safety Data Sheet. P363 Wash contaminated clothing 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. P501 – Dispose of contents/container to licenses treatment, storage and disposal facility (TSDF).											
2.3	Other Warnings:	In the event of	of an exposure ay seek advice	or medical in									
		2 00	NADOCIT	IONI O INI	CDED	ENT	NICO	\D.B.#	ATIO	. N.I			
		3. 00	MPOSIT	ION & IN	GRED		NEC	ואואו	- 12 Statement			- 1	
										RE LIMI	TS IN AIR	St. 50 (40 - 975)	1
						ACGIF			OHSC		OSI	U.S.	-
						ppm			ppm		рр	m	
шеми	CAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	TLV S				S-   AK   P	EL STE	L IDLH	OTHER
HEIVIN	CAL INAMIE(S)	7732-18-5	NA	231-791-2	60-100				NF N		IE NE		OTHER
VATE	R	1102 10 0	11473	1201 101 2	100 100	1 196 1 1					10   110		4/42
		8051-30-7	INA	232-483-0	1-5	I NA I I	NA	NF	NF I N	FIN	IA NA	NA.	****
ODIF	FIED ALKANOLAMIDE							india					1.00
		1303-96-4	VZ2275000	INA	1-5	(2)	(6)	NF .	NF I N	FΙί	2) NA	Na	(1) NIOSH
ODIL	IM TETRABORATE		e Damage 1; H3	15. H318	- Administra								
ODII	IM PYROPHOSPHATE	7758-16-9	UX6475000	231-835-0	1-5	I NA I I	NA I	NF T	NF I N	FIN	IA I NA	l NA	1
IBAS		Acute Tox. Or		1201 000 0	1,0	1 (4/3 ] 1	47.4		1 1 1		03   1023	1 136.3	** <b>.</b>
				215-090-9	1-5	I NA I I	NA I	NF I	NE I N	FIN	IA NA	NA	
ODIL	IM XYLENE SULFONATE		rmal 5; Eye Irrit.						1				3//
			10.00										
			45,000	FIRST A	And the confirmation of the	A MODELLA WORKS AND THE WARREST	100000000000000000000000000000000000000						
4.1	First Aid:	en	NOT INDUC nergency telep	hone number	for assista	nce and i	nstruc	tions.	Seek ir	nmedi	ate med	ical atter	
		<u>Eyes</u> : If ho	curs spontaned product gets in Iding eyelid(s) e, consult a ph	n the eyes, flu open to ensu	ish eyes re comple	thoroughl te flushin	y with g. If t	copic the ey	ous amo	ounts o	of water	for at le	
		Skin: Re the ha	emove contami e skin reaction s been properl	nated clothing worsens, con y cleaned.	and was tact a phy	h affected /sician im	d area media	s with itely. [	Do not v	ear c	ontamin	ated clot	hing until after
		Se	emove victim to eek immediate	medical attent		er extreme	e cond	ditions	, if breat	hing s	tops, pe	rform art	ificial respiratio
4.2	Effects of Exposure:	Skin: N	ritation upon d Mildly irritating. ossible sensiti	Prolonged o zation in some	individua	ls.							
			ritation to the ause lung dam		al tract. 1	his mater	rial ca	n ente	er the lu	ngs di	uring sw	allowing	or vomiting ar



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**PBP-006** Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.1 SDS Revision Date: 3/20/2017 4. FIRST AID MEASURES – cont'd 4.3 Redness, burning, irritation, stinging and swelling around eyes. Symptoms of Overexposure Eyes: Skin: Redness, burning, itching, rash, drying and defatting of the skin. Nausea, vomiting, severe abdominal pain. Ingestion: Coughing, wheezing, swelling of throat, irritation in mucous membranes, difficulty breathing. Inhalation: 44 Acute Health Effects: Irritation or possible burns upon direct skin contact. Possible irreversible damage to eyes. Irritation and possible sensitization with certain individuals. 4.5 Chronic Health Effects: Irritation and possible skin sensitization with certain individuals. Prolonged or repeated skin exposure may cause dermatitis Target Organs: Eyes, skin, respiratory system. 4.6 4.7 Medical Conditions Pre-existing dermatitis, other skin conditions, and disorders of the **HEALTH** 1 Aggravated by Exposure target organs (eyes, skin, and respiratory system). **FLAMMABILITY** 0 0 PHYSICAL HAZARDS PROTECTIVE EQUIPMENT В EYES SKIN 5. FIREFIGHTING MEASURES Fire & Explosion Hazards: Water-based product. Non-flammable. Use media as appropriate for surrounding fire. Carbon dioxide, foam, water spray, Halon (if permitted), dry chemical extinguisher. 5.2 Extinguishing Methods As with any fire, firefighters should wear appropriate protective equipment including 53 Firefighting Procedures: MSHA/NIOSH approved or equivalent self-contained breathing apparatus (SCBA) and protective clothing. 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. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. 6. ACCIDENTAL RELEASE MEASURES Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective 6.1 Spills Equipment (PPE). Use safety glasses or safety goggles and face shield, use gloves and other protective clothing (e.g., apron, boots, etc.) to prevent skin contact. Small Spills: Wear appropriate protective equipment including gloves and protective eyewear. Use a non-combustible, inert material such as vermiculite or sand to soak up the product and place into a container for later disposal. Large Spills: Keep incompatible materials (e.g., organics such as oil) away from spill. Stay upwind and away from spill or release. Isolate immediate hazard area and keep unauthorized personnel out of area. Stop spill or release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant. Recover as much free liquid as possible and collect in acid-resistant container. Use absorbent to pick up residue. Avoid discharging liquid directly into a sewer or surface waters. 7. HANDLING & STORAGE INFORMATION Avoid breathing mists or spray. Avoid eye and skin contact. Wear protective equipment when handling product. Keep out 7.1 Work & Hygiene Practices: of the reach of children. Do not eat, drink or smoke when handling this product. Wash thoroughly after handling. Immediately clean-up and decontaminate any spills or residues. Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans) away from heat and direct 7.2 Storage & Handling sunlight. Keep away from incompatible substances (see Section 10). Protect containers from physical damage Empty containers may retain hazardous product residues. 7.3 Special Precautions: 8. EXPOSURE CONTROLS & PERSONAL PROTECTION Exposure Limits: ACGIH NOHSC OSHA OTHER 8.1 ppm (mg/m<sup>3</sup>) ES-STEL TLV ES-TWA STEL ES-PEAK PEL STEL IDLH SODIUM TETRABORATE NF NF (2) (6) NF (2) NA Na (1) NIOSH Ventilation & Engineering 82 Use local or general exhaust ventilation to effectively remove and prevent buildup of vapors or mist generated from the Controls: handling of this product. Ensure appropriate decontamination equipment is available (e.g., sink, safety shower, eyewash station). 83 Respiratory Protection: In instances where vapors or sprays of this product are generated, and respiratory protection is needed, use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or Australia. Safety glasses with side shields must be used when handling or using this product. A protective face 8.4 Eve Protection shield is also recommended. 8.5 Hand Protection: Wear protective, chemical-resistant gloves (e.g., butyl rubber, neoprene, nitrile) when using or handling

Not required under normal conditions of use are recommended when handling or using large quantities

this product.

(e.g., > 5 gallons (18.9 L)) of this product

Body Protection:



13.2

Special Considerations

NA

# **SAFETY DATA SHEET**

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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision Date: 3/20/2017 SDS Revision: 2.1 9. PHYSICAL & CHEMICAL PROPERTIES Appearance 9.1 Pink liquid. 92 Odor No odor 9.3 Odor Threshold: NA 94 pH: 1.0 Melting Point/Freezing Point: NA 9.5 Initial Boiling Point/Boiling 9.6 > 100 °C (> 212 °F) 9.7 Flashpoint: NA Upper/Lower Flammability 9.8 LEL: NA; UEL: NA Vapor Pressure: 99 Vapor Density: > 1.0 (air = 1.0) 9 10 9 11 Relative Density: 1.012 Solubility: Complete (water) 9.12 Partition Coefficient (log Pow) 9.13 NA 9.14 Autoignition Temperature NA 9.15 Decomposition Temperature: NA 9.16 Viscosity: NA Evaporation Rate: < 1.0 (ethyl ether = 1.0) 9.17 Other Information: 10. STABILITY & REACTIVITY 10.1 Stable under normal storage and use conditions 10.2 Hazardous Decomposition Thermal decomposition may produce carbon, sulfur and nitrogen oxides, hydrocarbons and/or derivatives. Products Will not occur. Hazardous Polymerization: 10.3 Avoid high temperatures, ignition sources and incompatible materials. 10.4 Conditions to Avoid: 10.5 Incompatible Substances Strong reducing agents, acids, alkalis, oxidizing agents. 11. TOXICOLOGICAL INFORMATION Absorption: YES 11.1 Routes of Entry Inhalation: YES Ingestion: YES 11.2 Toxicity Data: Sodium Pyrophosphate, Dibasic: LD<sub>50</sub> (oral, mouse) = 2,650 mg/kg; Sodium Xylene Sulfonate: LD<sub>50</sub> (oral, rat) ≥ 7,200 11.3 Acute Toxicity: See Section 4.4 11.4 Chronic Toxicity See Section 4.5 Suspected Carcinogen NA Reproductive Toxicity This product is not reported to cause reproductive toxicity in humans. 11.6 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 See Section 4.2 Biological Exposure Indices 11.8 NE 11.9 Physician Recommendations: Treat symptomatically. 12. ECOLOGICAL INFORMATION Phosphates may persist indefinitely if released into groundwater. Sodium Xylene Sulfonate: OECD Test Guideline 12.1 Environmental Stability: 301B: 83-85% Readily biodegradable. Effects on Plants & Animals 12.2 No data available Effects on Aquatic Life No data available 12.3 13. DISPOSAL CONSIDERATIONS Waste Disposal: Review current local, state and federal laws, codes, statutes and regulations to determine current status and appropriate 13.1 disposal method for the ingredients listed in Section 2. Any disposal practice must be in compliance with local, state, and

federal laws and regulations. Contact the appropriate agency for specific information. Treatment, transport, storage and

disposal of hazardous waste must be provided by a licensed facility or waste hauler.



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		14. TRANSPORTATIO	N INFORMATION
Tho	hasin description (ID Num		n, packing group) is shown for each mode of transportation. Additional
		e required by 49 CFR, IATA/ICAO, IMDG and the C	
14.1	49 CFR (GND):	NOT REGULATED	775011.
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	
Ť		15. REGULATORY	NFORMATION
15.1	SARA Reporting	TOTAL	ubject to SARA Title III, section 313 reporting requirements.
15.2	Requirements: SARATPQ:	NA NA	
15.3	TSCA Inventory Status:	The components of this product are listed on the	TSCA Inventory
15.4	CERCLA Reportable Quantity:	NA	7 100/ Cinventory.
15.5	Other Federal Requirements:	NA NA	
15.6	Other Canadian Regulations:		the hazard criteria of the CPR and the MSDS
43000000	AND ADDRESS AND AD	contains all of the information required by the C	PR. The components of this product are listed on his product are listed on the Priorities Substances
15.7	State Regulatory Information:	Pennsylvania Right-to-Know List (PA).  None of the ingredients in this product, present state criteria lists: California Proposition 65	e following state criteria lists: New Jersey Right-to-Know List (NJ), and in a concentration of 1.0% or greater, are listed on any of the following (CA65), Delaware Air Quality Management List (DE), Florida Toxio
		Minnesota Hazardous Substances List (MN), N	lous Substances List (MA), Michigan Critical Substances List (MI) lew Jersey Right-to-Know List (NJ), New York Hazardous Substances ), Washington Permissible Exposures List (WA), Wisconsin Hazardous
15.8	Other Requirements:	NA NA	
	.91	79	100
		16. OTHER INFO	PRESENTATION FOR A STATE OF THE
16.1	Other Information:	IRRITATION. Avoid breathing mist/sprays. Co Wear protective gloves/eye protection. IF ON occurs: Get medical advice/attention. Specific tre	TACT WITH SKIN. CAUSES SKIN IRRITATION. CAUSES EYE ntaminated work clothing should not be allowed out of the workplace. SKIN: Wash with plenty of soap and water. If skin irritation or rash eatment – see section 4 of this Safety Data Sheet. Wash contaminated busly with water for several minutes. Remove contact lenses, if present DF 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 C government regulations must be reviewed for ap Products, Inc.'s knowledge, the information conti suitability or completeness is not guaranteed an The information contained herein relates only	OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other plicability to this product. To the best of ShipMate's & Precision Brand ained herein is reliable and accurate as of this date; however, accuracy, d no warranties of any type, either expressed or implied, are provided to the specific product(s). If this product(s) is combined with other sidered. Data may be changed from time to time. Be sure to consult the
16.4	Prepared for:	Precision Brand Products, Inc. 2250 Curtiss Street Downers Grove, IL 60515 USA Tel: +1 (630) 969-7200 Fax: +1 (630) 969-0310 http://www.precisionbrand.com	PRECISION BRAND.
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	ShipMate  Dangerous Goods Training & Consulting



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SDS Revision: 2.1

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### **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

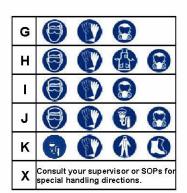
### **HEALTH, FLAMMABILITY & REACTIVITY RATINGS:**

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard



#### PERSONAL PROTECTION RATINGS:

Α	
В	
С	
D	<b>6 0 4</b>
Е	
F	





#### 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	FLAMMABILITY
1	Slight Hazard	A CONTRACTOR AND A CONT
2	Moderate Hazard	REACTIVITY
3	Severe Hazard	
4	Extreme Hazard	
ACD	Acidic	
ALK	Alkaline	
COR	Corrosive	<b>□</b> / <b>₹ ₩ </b>
₩	Use No Water	HEALTH 💮
ОХ	Oxidizer	SPECIAL
TREFOIL	Radioactive	PRECAUTIONS

#### 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>io</sub>	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD <sub>Io</sub> , LD <sub>Io</sub> , & LD <sub>o</sub> or	Lowest dose (or concentration) to cause lethal or toxic effects
TC, TCo, LCio, & LCo	GA MF
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TLm	Median threshold limit
log Kow or log Koc	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:

0	<b>(</b>	<b>(</b>		$\odot$	<b>®</b>		Ř
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:

$\Diamond$		<b>③</b>	$\Diamond$			$\Diamond$		<b>◆</b>
GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Hamful Irritating	Health Hazard	Environment



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		1. PF	RODUCT	Г& СОМ	PANY	<b>IDFNT</b>	TFICA	TION	J			
1.1	Product Name:	PREVENT®		te title ook best bline	ST STEERS OF	IDENT	11 107		50			,
1.2	Chemical Name:	Petroleum Distilla		oc i oki	VIOLA							,
1.3	Synonyms:	45119, 45116	ie									
1.4	Trade Names:	Prevent® Non-VO	C Formula									
1.5	Product Use:	Lubricate, Penetra		Mater Prote	ot Surface	ec from Co	rrocion					
1.6	Distributor's Name:	Precision Brand F			ci Suriaci	es iloni Co	JITOSIOII					3
12/2/15		2250 Curtiss Stre			4E 110A							
1.7	Distributor's Address:	_										
1.8	Emergency Phone:	ChemTrec +1 (			3) 527-3	887 or Po	oison C	ontrol	Center	r +1 (855	) 281-1	742
1.9	Business Phone / Fax:	+1 (630) 969-720	0 / +1 (630)	969-0310								,
			2. HA	ZARDS I	DENT	IFICAT	ION					
2.1	Hazard Identification:	This product is cla						ıs aood:	s accord	dina to the	classific	cation criteria of
		[NOHSC: 1088 (2										
		DANGER! MA				AND ENT	TERS AI	RWAY.	MAY	CAUSE	AN AL	LERGIC SKIN
		REACTION.							(0.0000)0000	3007/0107/000		
		Classification: As	n 1 Sens S	kin 1B								
2.2	Label Elements:	Hazard Statemen			al if swall	owed and	enters ai	irways	H317 -	May caus	se	
	many relational relations of the property of the control of the co	an allergic skin re		50 101			JI J UI			, oud		
		Precautionary St		): P233 – K	een conta	ainer tiahtl	v closed	P280	– Wea	r protectiv	/e	10.90
		gloves/eve prote										
		doctor/physician.										
		Contaminated we										
		SKIN: Wash wit										
		medical advice/a										
		P363 Wash conf										
		place. Keep coo										
						. Diopos	30 01 0011		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-	
		i ireaiment storad	e and dispos	SM DACHILY LLO	DEL							
2.3	Other Warnings:	In the event of ar				vina this n	roduct n	lease c	ontact a	nhvsiciar	or loca	l noison control
2.3	Other Warnings:	In the event of ar	n exposure d	or medical inq	uiry invol							
2.3	Other Warnings:		n exposure d	or medical inq	uiry invol							
2.3	Other Warnings:	In the event of ar center, who may	n exposure o seek advice t	or medical inq from the U.S.	uiry invol manufact	urer, and s	show thei	m this S	DS. Ke			
2.3	Other Warnings:	In the event of ar center, who may	n exposure o seek advice t	or medical inq	uiry invol manufact	urer, and s	show thei	m this S	DS. Ke	ep out of	reach o	
2.3	Other Warnings:	In the event of ar center, who may	n exposure o seek advice t	or medical inq from the U.S.	uiry invol manufact	ENT IN	show thei	MATIC EXPOS	DS. Ke	eep out of	reach o	
2.3	Other Warnings:	In the event of ar center, who may	n exposure o seek advice t	or medical inq from the U.S.	uiry invol manufact	ENT IN	show thei	MATIC EXPOS NOHSC	DS. Ke	TS IN AIR (M	reach o	
2.3	Other Warnings:	In the event of ar center, who may	n exposure o seek advice t	or medical inq from the U.S.	uiry invol manufact	ENT IN	IFORI	MATIC EXPOS NOHSC	ON SURE LIMI	eep out of	reach o	
		In the event of ar center, who may	n exposure of seek advice t	or medical inq from the U.S.	uiry involomanufact	ENT IN  ACGIH  ppm	IFOR	MATION SHAPE STATE OF THE STATE	ON SURE LIMI	TS IN AIR (m	reach (	of children.
	Other Warnings:  CAL NAME(S)	In the event of ar center, who may some series of the center of the cent	n exposure of seek advice for adv	or medical inq from the U.S. ON & INC	uiry involomanufact	ENT IN  ACGIH  ppm  TLV STI	Show the	MATIC EXPOS NOHSC ppm ES- STEL	ON  URE LIMI  ES- PEAK F	TS IN AIR (m OSHA ppm PEL STEL	reach (	of children.
СНЕМІ		In the event of ar center, who may so a conter.  3. COV  CAS No. RT 8042-47-5 P	n exposure of seek advice to seek ad	or medical inq from the U.S.	uiry involomanufact	ENT IN  ACGIH  ppm	Show the	MATIC EXPOS NOHSC ppm ES- STEL	ON  URE LIMI  ES- PEAK F	TS IN AIR (m	reach (	of children.
CHEMI WH ITI	CAL NAME(S) E MINERAL OIL	In the event of ar center, who may seem as a converse of the center of the center, who may seem as a center of the	POSITION PROPERTY IN THE PROPE	ON & INC EINECS No. 232-455-8	SREDI  % 60-100	ENT IN  ACGIH  ppm  TLV STI  (5) N/	IFORI EL ES- TWA A (5)	EXPOS NOHSC ppm ES- STEL NA	ON SURE LIMI ES- PEAK F	TS IN AIR (m OSHA ppm PEL STEL (5) (10) *	ing/m³)	OTHER
CHEMI WHITI	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED	3. CON  CAS No. RT  8042-47-5  Asp. Tox. 1; H304 64742-52-5  NA	POSITION PROPERTY IN THE CONTROL OF	ON & INC EINECS No. 232-455-8	uiry involomanufact	ENT IN  ACGIH  ppm  TLV STI	IFORI ES- TWA A (5)	EXPOS NOHSC ppm ES- STEL NA	ON SURE LIMI ES- PEAK F	TS IN AIR (m OSHA ppm PEL STEL	reach (	of children.
CHEMI WHITI SEVE NAPH	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O	3. CON  CAS No. RT  8042-47-5  Asp. Tox. 1; H304 64742-52-5  N/  * contains less tha	n exposure of seek advice for	or medical inq from the U.S. ON & INC EINECS No. 232-455-8	wiry involument involu	ENT IN  ACGIH  ppm  TLV STI  (5) N/	JFORI  ES- TWA A (5) 0) (5)	MATION EXPOSE NOHSC PPM ES-STEL NA	ON  SURE LIMI  ES- PEAK P  NA (	TS IN AIR (m OSHA ppm PEL STEL (5) (10) *	ig/m³) A IDLH (2500)	OTHER
CHEMI WHITI SEVE NAPH BARIU	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALEN	CAS No. RT 8042-47-5 PY Asp. Tox. 1; H304 64742-52-5 N/ * contains less that 25619-56-1 N/	n exposure of seek advice to seek ad	or medical inq from the U.S. ON & INC EINECS No. 232-455-8 265-155-0 1 Sulfoxide 247-132-7	wiry involument of the control of th	ENT IN  ACGIH  ppm  TLV STI  (5) N/  NA N/	IFORI  ES- TWA A (5)  O) (5)  A NF	MATION EXPOSE NOHSC PPM ES-STEL NA	ON  SURE LIMI  ES- PEAK P  NA (	TS IN AIR (m OSHA ppm PEL STEL (5) (10) *	ing/m³)	OTHER
CHEMI WHITI SEVE NAPH	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALEN	3. CON  CAS No. RT  8042-47-5  Asp. Tox. 1; H304 64742-52-5  N/  * contains less tha	n exposure of seek advice to seek ad	or medical inq from the U.S. ON & INC EINECS No. 232-455-8 265-155-0 1 Sulfoxide 247-132-7	wiry involument of the control of th	ENT IN  ACGIH  ppm  TLV STI  (5) N/  NA N/	IFORI  ES- TWA A (5)  O) (5)  A NF	MATION EXPOSE NOHSC PPM ES-STEL NA	ON  SURE LIMI  ES- PEAK P  NA (	TS IN AIR (m OSHA ppm PEL STEL (5) (10) *	ig/m³) A IDLH (2500)	OTHER
CHEMI WHITI SEVE NAPH BARIU	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALEN	CAS No. RT 8042-47-5 PY Asp. Tox. 1; H304 64742-52-5 N/ * contains less that 25619-56-1 N/	POSITION PROPERTY OF THE CS No. 178047000 PROPERTY OF THE CS NO. 17804700 PROPERTY OF THE C	DN & INC  EINECS No. 232-455-8  265-155-0 1 Sulfoxide 247-132-7 2ens. 1; Eye Irrit	% 60-100 10-30 17-13 . 2; H302, F	ENT IN  ACGIH  ppm  TLV STI  (5) N/  (5) (10  NA N/  1315, H317	ES-   TWA   (5)   (5)   A   NF   (19, H319, H3	MATION EXPOSE NOHSC PPM ES-STEL NA	ON  SURE LIMI  ES- PEAK P  NA (	TS IN AIR (m OSHA ppm PEL STEL (5) (10) *	ig/m³) A IDLH (2500)	OTHER
CHEMI WHITI SEVE NAPH BARIU	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALEN	CAS No. RT 8042-47-5 PY Asp. Tox. 1; H304 64742-52-5 N/ * contains less that 25619-56-1 N/	POSITION PROPERTY OF THE CS No. (78047000 ), H226 A (1) Irrit. 2; Skin S	DN & INC  EINECS No. 232-455-8  265-155-0 1 Sulfoxide 247-132-7 Fens. 1; Eye Irrit	% 60-100 10-30 7-13 . 2; H302, H	ENT IN  ACGIH  ppm  TLV STI  (5) N/  (5) (10  NA N/ H315, H317	IFORI  ES- EL TWA A (5)  O) (5) A NF C, H319, H3	m this S  WATI  EXPOS NOHSC ppm ES- STEL NA NA NA NF 332	ON  BURE LIMI  ES- PEAK F NA (  NA (	TS IN AIR (MOSHAPPEL STEL (10) *	ig/m³) A  IDLH (2500)  NA	OTHER * NIOSH
CHEMI WHITI SEVE NAPH BARIL SULF	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE	In the event of ar center, who may:  3. CON  CAS No. RT  8042-47-5 PY  Asp. Tox. 1; H304  64742-52-5 N/  * contains less that 25619-56-1 N/  Acute Tox. 4; Skin	POSITION POS	DN & INC  EINECS No. 232-455-8  265-155-0 1 Sulfoxide 247-132-7 Jens. 1; Eye Irrit	% 60-100 10-30 7-13 . 2; H302, H Contact	ENT IN  ACGIH  ppm  TLV STI  (5) N/  (5) (10  NA N/ H315, H317  ASURE SafetyCall	Show there	m this S  WATI  EXPOS NOHSC ppm ES- STEL NA NA NF 332	ON  BURE LIMI  ES- PEAK F NA (  NA (	TS IN AIR (MOSHAPPEL STEL (10) *  S) NA  NA NA	ing/m³) A  IDLH (2500)  NA  NA	OTHER * NIOSH
CHEMI WHITI SEVE NAPH BARIL SULF	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE	CAS No. RT  8042-47-5 Asp. Tox. 1; H304 64742-52-5 N/ * contains less that 25619-56-1 Acute Tox. 4; Skin	POSITION  ECS No.  78047000  H226  A  In 3% Dimethy  A  Init. 2; Skin S  OT INDUCE al emergency	DN & INC  EINECS No. 232-455-8  265-155-0 1 Sulfoxide 247-132-7 Jens. 1; Eye Irrit	% 60-100  7-13 . 2; H302, H Contact sumber for	ENT IN  ACGIH  ppm  TLV STI  (5) (10  NA NA  H315, H317  ASURE  SafetyCall r assistance	ES-   ES-   TWA   A (5)   (5)   A NF-   H319, H3	MATIUE EXPOSE NOHSC PPM ES-STEL NA	ON  BURE LIMI  ES- PEAK F NA (  NA (  NF N	TS IN AIR (MOSHAPPM STEL STEL STEL STEL STEL STEL STEL STEL	ig/m³) A IDLH (2500) NA NA Poisonate medi	OTHER * NIOSH  OLL MIST  Control Center cal attention. If
CHEMI WHITI SEVE NAPH BARIL SULF	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE	In the event of ar center, who may:  3. CON  CAS No. RT  8042-47-5 PY  Asp. Tox. 1; H304  64742-52-5 N/  * contains less that 25619-56-1 N/ Acute Tox. 4; Skin  Ingestion: DO N or loc vomiti	POSITION POS	DN & INC  EINECS No.  232-455-8  265-155-0  1 Sulfoxide  247-132-7  Sens. 1; Eye Irrit  FIRST All  VOMITING.  y telephone n  pontane ously,	% 60-100  7-13 . 2; H302, I  Contact sumber for keep vict	ENT IN  ACGIH  ppm  TLV STI  (5) N/  (5) (10  NA N/ H315, H317  ASURE  SafetyCall assistance im's head	IFORI  ES- EL TWA A (5)  O) (5)  A NF (H319, H3 ES- H1 (855) De and included include	MATIUE EXPOSIONOHSC PPM ES-STEL NA	ON  GURE LIMI  ES- PEAK F  NA (  NA (  NF N	TS IN AIR (MOSHAPPEL STEL (5) (10) *  NA NA NA  TO STEL (10) *  TO STEL (10) *  TO STEL (10) *	ig/m³)  A  IDLH (2500)  NA  NA  Poison ate medick of asp	OTHER * NIOSH  OLL MIST  Control Center cal attention. If
CHEMI WHITI SEVE NAPH BARIL SULF	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE	In the event of ar center, who may:  3. CON  CAS No. RT  8042-47-5 P  Asp. Tox. 1; H304  64742-52-5 N/  * contains less that  25619-56-1 N/  Acute Tox. 4; Skin  Ingestion: DO N or loc: vomitit  Eyes: If prod	POSITION  PECS No.  18047000  H226  A  In 3% Dimethy  A  Irrit. 2; Skin S  4. F  OT INDUCE al emergency ng occurs sp duct gets in	EINECS No. 232-455-8  265-155-0 I Sulfoxide 247-132-7 Jens. 1; Eye Irrit FIRST All EVOMITING. y telephone nontaneously, the eyes, flui	% 60-100  7-13 . 2; H302, H Contact umber for keep victsh eyes t	ENT IN  ACGIH  ppm  TLV STI  (5) N/  (5) (10  NA N/ H315, H317  ASURE  SafetyCall r assistance im's head horoughly	IFORI  ES- TWA A (5)  A NF H319, H3  +1 (855) ce and inclowered ( with cop	MATION EXPOSE NOHSC PPM ES-STEL NA	ON  SURE LIMI  ES- PEAK F  NA (  NA (  NF N  142 or the second of the se	TS IN AIR (MOSHAPPEL STEL (5) (10) *  NA NA NA  TS IN AIR (MOSHAPPEL STEL (10) *  NA NA NA  THE REPORT OF THE PER (10) *  TEN NA NA  THE REPORT OF THE PER (10) *  THE P	IDLH (2500)  NA  NA  t Poison at e medick of asperor at lea	OTHER * NIOSH OIL MIST  Control Center cal attention. If iration.
CHEMI WHITI SEVE NAPH BARIL SULF	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE	In the event of ar center, who may :   3. CON	PECS No. (78047000 , H226 A Ilmit. 2; Skin S  OT INDUCE al emergency ng occurs sp duct gets in ng eyelid(s) of	EINECS No. 232-455-8  265-155-0 I Sulfoxide 247-132-7 Jens. 1; Eye Irrit FIRST All EVOMITING. y telephone nontaneously, the eyes, flui	% 60-100  10-30  7-13 . 2; H302, H Contact umber for keep vict sh eyes te complete	ENT IN  ACGIH  ppm  TLV STI  (5) N/  (5) (10  NA N/  H315, H317  ASURE  SafetyCall r assistance im's head inhoroughly te flushing	IFORI  ES- TWA  A (5)  O) (5)  A NF H319, H3  Se and insert of the equilibrium of the equ	MATION EXPOSE NOHSC PPM ES-STEL NA	ON  SURE LIMI  ES- PEAK F  NA (  NA (  NF N  142 or the second of the se	TS IN AIR (MOSHAPPEL STEL (5) (10) *  NA NA NA  TS IN AIR (MOSHAPPEL STEL (10) *  NA NA NA  THE REPORT OF THE PER (10) *  TEN NA NA  THE REPORT OF THE PER (10) *  THE P	IDLH (2500)  NA  NA  t Poison at e medick of asperor at lea	OTHER * NIOSH  OLL MIST  Control Center cal attention. If iration. ast 15 minutes,
CHEMI WHITI SEVE NAPH BARIL SULF	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE	In the event of arcenter, who may state	recs No. rec	DN & INC  EINECS No.  232-455-8  265-155-0  1 Sulfoxide 247-132-7  iens. 1; Eye Irrit  FIRST All  VOMITING. y telephone n contaneously, the eyes, fluidate popen to ensur- sician or eme	% 60-100  10-30  7-13 . 2; H302, H  Contact umber for keep vict sh eyes to e complete rgency row	ENT IN  ACGIH  ppm  TLV STI  (5) N/  (5) (10  NA N/ H315, H317  ASURE SafetyCall r assistance im's head I horoughly te flushing com immed	IFORI  EL ESTAWA  A (5)  O) (5)  A NF, H319, H3  ES H1 (855)  Co and installowered (with copulation of the eliately.	MATION EXPOSE NOHSC PPM ES-STEL NA	ON  SURE LIMI  ES- PEAK F  NA (  NA (  NF N  142 or the seed of th	TS IN AIR (MOSHAPPPM SEL STEL (5) (10) *  (5) NA  NA NA  ne nearest k immedia uce the ris of water ficome swo	IDLH (2500)  NA  NA  Poison at emodik of asport at least of asport at least older during the second	OTHER * NIOSH  OLL MIST  Control Center cal attention. If iration. ast 15 minutes,
CHEMI WHITI SEVE NAPH BARIL SULF	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE	In the event of ar center, who may :   3. CON	PECS No. (78047000 , H226 An 3% Dimethy A Irrit. 2; Skin S OT INDUCE al emergency al emergency decrease in g eyelid(s) consult a physical experience.	EINECS No. 232-455-8  265-155-0 1 Sulfoxide 247-132-7 iens. 1; Eye Irrit  FIRST All Vollephone ontaneously, the eyes, fluippen to ensur- sician or eme- ated clothing	% 60-100  10-30  7-13 . 2; H302, H  Contact sumber for keep vict sh eyes to e completing ency roand wash	ENT IN  ACGIH  ppm  TLV STI  (5) N/  (5) (10  NA N/ H315, H317  ASURE  SafetyCall r assistance in imits head if horoughly te flushing om immed affected	IFORI  ESTAWA  A (5)  A NF , H319, H3  S +1 (855)  be and install wered ( with cop live areas with	MATION EXPOSE NOHSC PPM ES-STEL NA NA NA NA NA STELL S	ON  SURE LIMI  ES- PEAK F  NA (  NA (  NF N  142 or the s. Seele) to redund to see be and wa	TS IN AIR (MOSHAPPPM PEL STEL (5) (10) *  (5) NA  NA NA  NA NA  The nearest k immedia k immedia sof water for water for come swotter. If dis	IDLH (2500)  NA  NA  Poison at endick of asplor at leadlen dur	OTHER  * NIOSH  OLL MIST  Control Center cal attention. If iration. ast 15 minutes, ing or following
CHEMI WHITI SEVE NAPH BARIL SULF	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE	In the event of ar center, who may:  3. CON  CAS No. RT  8042-47-5 P  Asp. Tox. 1; H304  64742-52-5 N/  * contains less that  25619-56-1 N/  Acute Tox. 4; Skin  Ingestion: DO N or loc: vomiti Eyes: If products of the skin:  Skin: Remoderate	PECS No. (78047000 , H226 An 3% Dimethy A Irrit. 2; Skin S OT INDUCE al emergency al emergency decrease in g eyelid(s) consult a physical experience.	EINECS No. 232-455-8  265-155-0 1 Sulfoxide 247-132-7 2ens. 1; Eye Irrit VOMITING. y telephone n contaneously, the eyes, fluit open to ensur- sician or eme- ated clothing worsens, cont	% 60-100  10-30  7-13 . 2; H302, H  Contact sumber for keep vict sh eyes to e completing ency roand wash	ENT IN  ACGIH  ppm  TLV STI  (5) N/  (5) (10  NA N/ H315, H317  ASURE  SafetyCall r assistance in imits head if horoughly te flushing om immed affected	IFORI  ESTAWA  A (5)  A NF , H319, H3  S +1 (855)  be and install wered ( with cop live areas with	MATION EXPOSE NOHSC PPM ES-STEL NA NA NA NA NA STELL S	ON  SURE LIMI  ES- PEAK F  NA (  NA (  NF N  142 or the s. Seele) to redund to see be and wa	TS IN AIR (MOSHAPPPM PEL STEL (5) (10) *  (5) NA  NA NA  ne nearesta k immedia cuce the riss of water for come swotter. If dis	IDLH (2500)  NA  NA  Poison at endick of asplor at leadlen dur	OTHER  * NIOSH  Control Center cal attention. If iration. ast 15 minutes, ing or following persists and/or
CHEMI WHITI SEVE NAPH BARIL SULF	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE	In the event of ar center, who may:  3. CON  CAS No. RT  8042-47-5 PY  Asp. Tox. 1; H304  64742-52-5 N/  * contains less that  25619-56-1 N/  Acute Tox. 4; Skin  Ingestion: DO N or loc: vomitit  Eyes: If production in the skin in the	POSITION  PECS No.  18047000  1826  183% Dimethy  184  187  187  188  188  188  188  188	EINECS No. 232-455-8  265-155-0 Sulfoxide 247-132-7 Gens. 1; Eye Irrit VOMITING. y telephone n contaneously, the eyes, flui open to ensur- sician or eme ated clothing worsens, cont cleaned.	manufact  REDI  % 60-100  10-30  7-13 . 2; H302, H  Contact : umber for keep vict sh eyes to e complete rgency roand wast act a phy	ENT IN  ACGIH  PPM  TLV STI  (5) N/  (5) (10  NA N/ H315, H317  ASURE  SafetyCall r assistance im's head if im's head if horoughly te flushing om immed affected sician imm	IFORI  EST TWA  A (5)  A NF  (H319, H3  Iowered (with copilicately. areas with endiately.	MATION EXPOSE NOHSC PPM ES-STEL NA	DS. Ke ON SURE LIMI ES- PEAK F NA ( NF N is. Seel ) to redunounts of face be and was a wear c	TS IN AIR (MOSHAPPPM PEL STEL (5) (10) *  NA N	IDLH (2500)  NA  NA  Poison at emedick of aspor at leadlen dur	OTHER  * NIOSH  Control Center cal attention. If irration. ast 15 minutes, ing or following persists and/or ing until after it
CHEMI WHITI SEVE NAPH BARIL SULF	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE	In the event of ar center, who may:  3. CON  CAS No. RT  8042-47-5 PY  Asp. Tox. 1; H304  64742-52-5 N/  * contains less that  25619-56-1 N/  Acute Tox. 4; Skin  Ingestion: DO N or locity vomitit  Eyes: If production in the skin in th	POSITION  PECS No.  178047000  18047	EINECS No. 232-455-8  265-155-0 Sulfoxide 247-132-7 Gens. 1; Eye Irrit VOMITING. y telephone n ontaneously, the eyes, flut open to ensur- sician or eme ated clothing worsens, cont cleaned. to fresh air	manufact  REDI  % 60-100  10-30  7-13 . 2; H302, H  Contact : umber for keep vict sh eyes te e complete rgency roand wash act a phy at once.	ENT IN  ACGIH  PPM  TLV STI  (5) N/  (5) (10  NA N/ H315, H317  ASURE  SafetyCall assistance im's head is flushing om immed on affected sician imm  Under expenses.	IFORI  EST TWA  A (5)  A NF  (H319, H3  Iowered (with copilicately. areas with endiately.	MATION EXPOSE NOHSC PPM ES-STEL NA	DS. Ke ON SURE LIMI ES- PEAK F NA ( NF N is. Seel ) to redunounts of face be and was a wear c	TS IN AIR (MOSHAPPPM PEL STEL (5) (10) *  NA N	IDLH (2500)  NA  NA  Poison at emedick of aspor at leadlen dur	OTHER  * NIOSH  Control Center cal attention. If iration. ast 15 minutes, ing or following persists and/or
CHEMI WHITI SEVE NAPH BARIL SULF,	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE  First Aid:	In the event of ar center, who may:  3. CON  CAS No. RT  8042-47-5 P  Asp. Tox. 1; H304 64742-52-5 N/ * contains less that 25619-56-1 N/ Acute Tox. 4; Skin  Ingestion: DO N or loc: vomitit Eyes: If procholdin use, c Skin: Remothe sk has be Inhalation: Rei	POSITION  PECS No.  178047000  H226  A  Init. 2; Skin S  4. F  OT INDUCE al emergency ng occurs sin duct gets in g eyelid(s) occurs and consult a physical consult a	EINECS No.  232-455-8  265-155-0  Sulfoxide 247-132-7  Gens. 1; Eye Irrit  FIRST All  VOMITING.  y telephone n bontaneously, the eyes, fluit open to ensure sician or eme ated clothing worsens, cont cleaned. to fresh air ek immediate	manufact  REDI  % 60-100  10-30  7-13 . 2; H302, H  Contact : umber for keep vict sh eyes te e complete rgency roand wash act a phy at once.	ENT IN  ACGIH  PPM  TLV STI  (5) N/  (5) (10  NA N/ H315, H317  ASURE  SafetyCall assistance im's head is flushing om immed on affected sician imm  Under expenses.	IFORI  EST TWA  A (5)  A NF  (H319, H3  Iowered (with copilicately. areas with endiately.	MATION EXPOSE NOHSC PPM ES-STEL NA	DS. Ke ON SURE LIMI ES- PEAK F NA ( NF N is. Seel ) to redunounts of face be and was a wear c	TS IN AIR (MOSHAPPPM PEL STEL (5) (10) *  NA N	IDLH (2500)  NA  NA  Poison at emedick of aspor at leadlen dur	OTHER  * NIOSH  Control Center cal attention. If irration. ast 15 minutes, ing or following persists and/or ing until after it
CHEMI WHITI SEVE NAPH BARIL SULF	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED  THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE	In the event of ar center, who may:  3. CON  SANO. RT  8042-47-5 PY  Asp. Tox. 1; H304 64742-52-5 N// * contains less that 25619-56-1 N// Acute Tox. 4; Skin  Ingestion: DO N or loc: vomitit Eyes: If products of the skin shald in the skin shall in	POSITION  PECS No.  178047000  1826  183% Dimethy  184  187  187  188  188  188  188  188	EINECS No.  232-455-8  265-155-0  4 Sulfoxide 247-132-7 Eens. 1; Eye Irrit  FIRST All  VOMITING.  y telephone n bontaneously, the eyes, flue ppen to ensure sician or eme ated clothing worsens, cont cleaned. to fresh air ek immediate ect contact.	### SPECION SPECIAL SP	ENT IN  ACGIH  PPM  TLV STI  (5) N/  (5) (10  NA N/ H315, H317  ASURE  SafetyCall assistance im's head is flushing om immed on affected sician imm  Under expenses.	IFORI  EST TWA  A (5)  A NF  (H319, H3  Iowered (with copilicately. areas with endiately.	MATION EXPOSE NOHSC PPM ES-STEL NA	DS. Ke ON SURE LIMI ES- PEAK F NA ( NF N is. Seel ) to redunounts of face be and was a wear c	TS IN AIR (MOSHAPPPM PEL STEL (5) (10) *  NA N	IDLH (2500)  NA  NA  Poison at emedick of aspor at leadlen dur	OTHER  * NIOSH  Control Center cal attention. If irration. ast 15 minutes, ing or following persists and/or ing until after it
CHEMI WHITI SEVE NAPH BARIL SULF,	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE  First Aid:	In the event of ar center, who may:  3. CON  Solution Service	TECS No.  Y8047000  H226  A  Inrit. 2; Skin S  OT INDUCE al emergency ng occurs sp duct gets in g eyelid(s) consult a physical vecen properly move victim piration. See tion upon dir- tion and poss	EINECS No.  232-455-8  265-155-0  Sulfoxide 247-132-7  Jens. 1; Eye Irrit  FIRST All  VOMITING.  y telephone nontaneously, the eyes, fluopen to ensursician or emeated clothing worsens, contices and to fresh air ek immediate ect contact. sible dermatiti	% 60-100  7-13 2; H302, F  Contact umber for keep vict sheep vict sheep steep complete regency roand washact a phy at once, medical and sis.	ENT IN  ACGIH  PPM  TLV STI  (5) (10  NA NA  H315, H317  ASURE  SafetyCall  assistance im's head I horoughly te flushing om immed on affected sician imm  Under extention.	ES-TWA A (5)  O) (5)  A NF H319, H3 H31	MATION EXPOSE NOHSC PPM ES-STEL NA	ES-PEAK FNA ( NF NA (	TS IN AIR (MOSHAPPEL STEL (5) (10) *  NA NA NA  THE NAME OF THE NA	IDLH (2500)  NA  NA  Poison at e medick of aspior at leadlen dure accomfort accomfort stops, p	OTHER  * NIOSH  OIL MIST  Control Center cal attention. If iration. ast 15 minutes, ing or following persists and/or ing until after it perform artificial
CHEMI WHITI SEVE NAPH BARIL SULF,	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE  First Aid:	In the event of ar center, who may:  3. CON  Solution 1	TECS No.  Y8047000  H226  A  Inrit. 2; Skin S  OT INDUCE al emergency ng occurs sp duct gets in g eyelid(s) consult a physical vec contamin via reaction reaction upon dir- tion and possition to the gas	EINECS No.  232-455-8  265-155-0  Sulfoxide 247-132-7  Jens. 1; Eye Irrit  FIRST All  VOMITING.  y telephone nontaneously, the eyes, flustopen to ensursician or emeated cloth, ingoverned to fresh air ek immediate ect contact. Sible dermatitianstrointestinal	PREDI  % 60-100  10-30  7-13 . 2; H302, I  Contact : umber for keep vict sh eyes the complete regency round wash act a phy at once, medical and is. tract. Aspertical contracts and contract is tract.	ENT IN  ACGIH  PPM  TLV STI  (5) N/  (5) (10  NA N/ H315, H317  ASURE  SafetyCall assistance im's head in horoughly the flushing om immed an affected sician imm  Under extention.	IFORI  ESTAWA A (5)  O) (5)  A NF C, H319, H3  ESTAWA A (5)  In the ediately.  A areas with cop.  A lifthe ediately.  A areas with cop.	MATION EXPOSE NOHSC PRIME ES-STEL NA	DS. Ke ON  FURE LIMI  FRAK F  NA (  NF N  142 or the second of the secon	TS IN AIR (MOSHAPPM STEL STEL (5) (10) *  NA NA NA  THE NAME OF TH	IDLH (2500)  NA  NA  Poison at emedick of aspior at leadlen dure accomfort a	OTHER  * NIOSH  OIL MIST  Control Center cal attention. If iration. ast 15 minutes, ing or following persists and/or ing until after it perform artificial cal pneumonia.
CHEMI WHITI SEVE NAPH BARIL SULF,	CAL NAME(S)  E MINERAL OIL  RELY HYDROTREATED THENIC PETROLEUM O  IM ALKYLNAPHTHALENI  ATE  First Aid:	In the event of ar center, who may:  3. CON  Solution Series Series Series Series Series Irrital Ingestion: Inhalation: Inhala	TECS No.  Y8047000  H226  A  In 3% Dimethy  A  Irrit. 2; Skin S  Unit 2; Skin S  Grandle energency  and energen	EINECS No.  232-455-8  265-155-0  Sulfoxide 247-132-7  Jens. 1; Eye Irrit  FIRST All  VOMITING.  y telephone nontaneously, the eyes, flustopen to ensursician or emeated cloth, ingoverned to fresh air ek immediate ect contact. Sible dermatitianstrointestinal	## Contact umber for keep victs heyes te complete regency roand washact a phy at once. medical at tract. Aspentrations	ENT IN  ACGIH  PPM  TLV STI  (5) N/  (5) (10  NA N/  1315, H317  ASURE  SafetyCall  assistance im's head in horoughly the flushing own immed a sician imm  Under extention.	IFORI  ESTAWA A (5)  O) (5)  A NF C, H319, H3  ESTAWA A (5)  In the ediately.  A areas with cop.  A lifthe ediately.  A areas with cop.	MATION EXPOSE NOHSC PRIME ES-STEL NA	DS. Ke ON  FURE LIMI  FRAK F  NA (  NF N  142 or the second of the secon	TS IN AIR (MOSHAPPM STEL STEL (5) (10) *  NA NA NA  THE NAME OF TH	IDLH (2500)  NA  NA  Poison at emedick of aspior at leadlen dure accomfort a	OTHER  * NIOSH  OIL MIST  Control Center cal attention. If iration. ast 15 minutes, ing or following persists and/or ing until after it perform artificial



Respiratory Protection:

8.3

## SAFETY DATA SHEET

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**PBP-004** Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.0 SDS Revision Date: 3/14/2017 4. FIRST AID MEASURES - cont'd Redness, burning, irritation, and swelling around eyes. 4.3 Symptoms of Overexposure Eyes: Skin: Redness, burning, itching, rash, and scaling of the skin (dermatitis). Nausea, vomiting, severe abdominal pain. Ingestion: Coughing, wheezing, swelling of throat, irritation in mucous membranes, difficulty breathing Inhalation: 4.4 Acute Health Effects: May be fatal if swallowed and enters airways. May cause an allergic skin reaction. May be harmful if swallowed. Breathing of high vapor concentrations may cause headaches, stupor, irritation of throat and eyes, and kidney effects Chronic Health Effects: May damage the nervous system, kidney and/or liver. 4.5 4.6 Target Organs Eyes, skin, lungs. 4.7 Medical Conditions Persons with pre-existing central nervous system (CNS) disease. HEALTH 1 Aggravated by Exposure neurological conditions, skin disorders, chronic respiratory diseases, **FLAMMABILITY** 1 or impaired liver or kidney function should avoid exposure. 0 PHYSICAL HAZARDS PROTECTIVE EQUIPMENT В EYES SKIN 5. FIREFIGHTING MEASURES High heat will cause product to boil, evolving vapor that could cause explosive rupture of closed 5.1 Fire & Explosion Hazards: containers. Avoid all ignition sources such as sparks, heat and open flames. Product or residue can ignite explosively. 5.2 Extinguishing Methods: Carbon dioxide, foam, low velocity water fog, Halon (if permitted), dry chemical extinguisher. Firefighting Procedures: As with any fire, firefighters should wear appropriate protective equipment including a 5.3 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 Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective 6.1 Spills Equipment (PPE). Use safety glasses or safety goggles and face shield; use gloves and other protective clothing (e.g., apron, boots, etc.) to prevent skin contact. Small Spills: Wear appropriate protective equipment including gloves and protective eyewear. Use a non-combustible, inert material such as vermiculite or sand to soak up the product and place into a container for later disposal. Large Spills: Keep incompatible materials (e.g., organics such as oil) away from spill. Stay upwind and away from spill or release. Isolate immediate hazard area and keep unauthorized personnel out of area. Stop spill or release if it can be done with minimal risk. Use ONLY non-sparking tools. Wear appropriate protective equipment including respiratory protection as conditions warrant. Recover as much free liquid as possible and collect in acid-resistant container. Use absorbent to pick up residue. Avoid discharging liquid directly into a sewer or surface waters. 7. HANDLING & STORAGE INFORMATION Avoid breathing mists or spray. Avoid eye and skin contact. Wear protective equipment when handling product. Keep out 7.1 Work & Hygiene Practices: of the reach of children. Do not eat, drink or smoke when handling this product. Wash thoroughly after handling. Do not expose to heat and flame. Use only in ventilated areas. Immediately clean-up and decontaminate any spills or residues. 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. Store in closed containers. Avoid temperatures above 40°C (120°F). Keep away from incompatible substances (see Section 10). Protect containers from physical damage. Empty containers may retain hazardous product residues. 7.3 Special Precautions: 8. EXPOSURE CONTROLS & PERSONAL PROTECTION Exposure Limits ACGIH NOHSC OSHA OTHER 8.1 ppm (mg/m<sup>3</sup>) TLV STEL ES-TWA ES-STEL ES-PEAK PEL STEL IDLH CHEMICAL NAME(S) \* NIOSH WHITE MINERAL OIL (5) NA (5) NA NA (5) (10)(2500)SEVERELY HYDROTREATED OIL MIST (5) (10)(5) (5)NA NA NAPHTHENIC PETROLEUM OIL 8.2 Ventilation & Engineering 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-

> In instances where vapors or sprays of this product are generated, and respiratory protection is needed, use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or Australia.



Special Considerations

13.2

## SAFETY DATA SHEET

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**PBP-004** Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.0 SDS Revision Date: 3/14/2017 8. EXPOSURE CONTROLS & PERSONAL PROTECTION – cont'd Eye Protection: Safety glasses with side shields must be used when handling or using this product. A protective face 84 shield is also recommended. Wear protective, chemical-resistant gloves (e.g., neoprene) when using or handling this product. 8.5 Hand Protection: Not required under normal conditions of use. A chemical resistant apron and/or protective clothing are 8.6 Body Protection recommended when handling or using large quantities (e.g., > 5 gallons (18.9 L)) of this product 9. PHYSICAL & CHEMICAL PROPERTIES Opaque, light brown liquid 9.1 Appearance: Kerosene odor Odor Odor Threshold 93 NA NA 94 9.5 Melting Point/Freezing Point: NA 9.6 Initial Boiling Point/Boiling > 110 °C (> 230 °F) Range: 9.7 Flashpoint 120 °C (248 °F), open cup 9.8 Upper/Lower Flammability LEL: NA; UEL: NA 9.9 Vapor Pressure NA 9 10 Vapor Density > 1.0 (air = 1.0)9.11 Relative Density: 0.8057 9.12 Solubility Immiscible (water) 9 13 Partition Coefficient (log Pow) NA NA 9.14 Autoignition Temperature Decomposition Temperature: 9.15 NA Viscosity NA 9 17 Other Information Evaporation Rate: < 1.0 (ethyl ether = 1.0); VOC: 0.2 lbs/gallon 10. STABILITY & REACTIVITY Stable under normal storage and use conditions. 10.1 Stability 10.2 Hazardous Decomposition Thermal decomposition may produce carbon and nitrogen oxides, hydrocarbons and/or derivatives. 10.3 Hazardous Polymerization: Will not occur 10 4 Conditions to Avoid: Avoid high temperatures, ignition sources and incompatible materials. 10.5 Strong reducing agents, acids, alkalis, oxidizing agents. Incompatible Substances 11. TOXICOLOGICAL INFORMATION Routes of Entry Inhalation: YES Absorption: YES Ingestion: YES 11.1 11.2 Toxicity Data: Severely Hydrotreated Naphthenic Petroleum Oil (Mineral Oil): LD50 (oral, rat) > 5,000 mg/kg 11.3 Acute Toxicity: See Section 4.4 11.4 Chronic Toxicity See Section 4.5 Suspected Carcinogen 11.5 IARC 3 (not classifiable as to carcinogenicity in humans (for mineral oils, highly refined)) 11.6 Reproductive Toxicity This product is not reported to cause 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: See Section 4.2 11.8 Biological Exposure Indices NE 11.9 Physician Recommendations: Treat symptomatically. 12. ECOLOGICAL INFORMATION 12.1 Environmental Stability: This product is expected to have a low potential to degrade and thus is expected to persist in the environment. ⊐Do not allow to enter into soil/subsoil. If product enters soil, it will be mobile and may contaminate groundwater. ¬ Effects on Plants & Animals No data available 12.3 Effects on Aquatic Life No data available. 13. DISPOSAL CONSIDERATIONS Review current local, state and federal laws, codes, statutes and regulations to determine current status and appropriate 13.1 Waste Disposal disposal method for the ingredients listed in Section 2. Any disposal practice must be in compliance with local, state, and federal laws and regulations. Contact the appropriate agency for specific information. Treatment, transport, storage and

disposal of hazardous waste must be provided by a licensed facility or waste hauler.

assigned EPA Hazardous Waste Number D005 (Toxicity Characteristic - Barium)

If incinerated, the resulting ash will contain extractable barium. A waste with extractable barium of 100 ppm or greater is



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

Fax: +1 (310) 370-5700 http://www.shipmate.com SDS Revision: 2.0

SDS Revision Date: 3/14/2017

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 TPQ:	NA NA
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 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 D2B (Materials Causing Other Toxic Effects).
15.7	State Regulatory Information:	Severely Hydrotreated Naphthenic Petroleum Oil (Mineral Oil) is found on the following state criteria lists: New Jersey Right-to-Know List (NJ), and Pennsylvania Right-to-Know List (PA).  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:	NA .

## **16. OTHER INFORMATION**

		IO. OTTICIX IN	ORMATION
16.1	Other Information:	REACTION. Wear protective gloves/eye protective	/ED AND ENTERS AIRWAY. MAY CAUSE AN ALLERGIC SKIN ction. If swallowed, immediately call a Poison Center or doctor/physician. cash occurs: Get medical advice/attention. Store in a cool, well-ventilated CH OF CHILDREN.
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.	
16.3	Disclaimer:	government regulations must be reviewed for a Products, Inc.'s knowledge, the information con suitability or completeness is not guaranteed a The information contained herein relates only	OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other applicability to this product. To the best of ShipMate's & Precision Brand tained herein is reliable and accurate as of this date; however, accuracy, nd no warranties of any type, either expressed or implied, are provided. If this product(s) is combined with other insidered. Data may be changed from time to time. Be sure to consult the
16.4	Prepared for:	Precision Brand Products, Inc. 2250 Curtiss Street Downers Grove, IL 60515 USA Tel: +1 (630) 969-7200 Fax: +1 (630) 969-0310 http://www.precisionbrand.com	PRECISION BRAND.
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	ShipMate*  Dangerous Goods Training & Consulting



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

SDS Revision: 2.0

SDS Revision Date: 3/14/2017

### **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

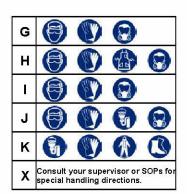
#### **HEALTH, FLAMMABILITY & REACTIVITY RATINGS:**

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard



#### PERSONAL PROTECTION RATINGS:

Α	
В	
С	
D	
Е	
F	





#### OTHER STANDARD ABBREVIATIONS:

Carc	Carcinogenic
Irrit	Imitant
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	PLANNA DILITY
1	Slight Hazard	FLAMMABILITY
2	Moderate Hazard	REACTIVITY
3	Severe Hazard	
4	Extreme Hazard	
ACD	Acidic	
ALK	Alkaline	
COR	Corrosive	
₩	Use No Water	HEALTH
ОХ	Oxidizer	SPECIAL
TREFOIL	Radioactive	PRECAUTIONS

#### TOXICOLOGICAL INFORMATION:

LD <sub>50</sub>	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 <sub>Io</sub>	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD <sub>Io</sub> , LD <sub>Io</sub> , & LD <sub>o</sub> or TC, TC <sub>o</sub> , LC <sub>Io</sub> , & LC <sub>o</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
TLm	Median threshold limit
log Kow or log Koc	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:

0	<b>(A)</b>	<b>(a)</b>	<b>®</b>	①	<b>®</b>		Ř
Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compressed	Flammable	Oxidizing	Taxic	Irritation	Infectious	Corrosive	Reactive

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

	<b>③</b>	<b>③</b>	$\Diamond$			$\Diamond$		*
GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Hamful Irritating	Health Hazard	Environment



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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.0 SDS Revision Date: 3/16/2017 1. PRODUCT & COMPANY IDENTIFICATION 1.1 Product Name TOOL-BLACK® GEL 1.2 Chemical Name Acid Mixture 13 Synonyms 45311, 45328 Tool-Black® Gel 1.4 Trade Names 1.5 Product Use: Blackening Solution for Iron and Steel 1.6 Distributor's Name Precision Brand Products, Inc. 2250 Curtiss Street, Downers Grove IL 60515 USA Distributor's Address 17 1.8 Emergency Phone ChemTrec +1 (800) 424-9300 / +1 (703) 527-3887 or Poison Control Center +1 (855) 281-1742 Business Phone / Fax: +1 (630) 969-7200 /+1 (630) 969-0310 1.9 2. HAZARDS IDENTIFICATION 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! TOXIC IF SWALLOWED. MAY CAUSE SEVERE SKIN BURNS OR EYE DAMAGE. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. Classification: Acute Toxicity 3; Skin Corrosion1A; STOT-RE 2; Chronic Aquatic Toxicity 1 Label Elements: Hazard Statements (H): H301 - Toxic if swallowed. H314 - Causes severe skin burns and eye damage. H373 - May cause damage to organs through prolonged or repeated exposure. H410 -Very toxic to aquatic life with long lasting effects. Precautionary Statements (P): P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P220 - Keep/Store away from clothing/ combustible materials. P273 - Avoid release to the environment. P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or 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. P370 - In case of fire: Use fire-extinguishing media appropriate for surrounding materials to extinguish. P391 - Collect spillage. P501 - Dispose of contents/ container to an approved waste disposal plant. 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 EXPOSURE LIMITS IN AIR (mg/m3) ACGIH NOHSC **OSHA** ppm mag mag ES-ES-ES-TLV STEL PEAK PEL STEL IDLH CHEMICAL NAME(S) RTECS No. **EINECS No** OTHER CAS No. TWA STEL 7732-18-5 ZC0110000 231-791-2 60-100 NE NE NF NF NF NE NE NE WATER POLYOXYETHYLENE STEARYL 9005-00-9 NA 500-017-8 7-13 NΑ NA NF NF NF NA NA NA WAX DERIVATIVES 7758-99-8 NA NA 5-10 (1) NA NF 1000 NF NF (1) NA CUPRIC SULFATE Acute Toxicity 4; H302 231-974-7 7783-00-8 VS7175000 1-5 (0.2) NA (0.2) NF NF (0.2) NA NA SELENIOUS ACID Acute Toxicity-Inh 3; Acute Toxicity-Oral 3; STOT-Repeated Exp 2; Acute Aquatic Toxicity 1; Chronic Aquatic Toxicity 1; H301, H331, H400, H402 QU5775000 231-714-2 1-5 2 4 2 NF NF 2 NA 7697-37-2 25 NITRIC ACID Oxidizing Liquid 3; Skin Corrosion 1A; H272, H314 4. FIRST AID MEASURES First Aid: Do not induce vomiting. Call +1 (855) 281-1742 for emergency medical advice. If vomiting occurs, keep Ingestion: victim's head lowered (forward) to keep vomit from entering the lungs. Call 911 for emergency medical transport if any symptoms noted. Remove and discard contact lenses if worn and flush eyes with large amounts of water for at least 20 Eyes: minutes. Seek immediate medical attention when done rinsing eyes. Remove contaminated clothing and wash exposed skin with large amounts of soap and water. Seek Skin: medical attention if any blistering, swelling or open sores develop. Move victim to fresh air. Contact emergency medical services (911) if any difficulty in breathing occurs or if Inhalation: victim loses consciousness.



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4.3	Effects of Exposure:	<u>Eyes</u> : Severe or permanent eye damage. Skin: Burns upon direct contact.		
189-01		Skin: Burns upon direct contact.		
189-01				
		Ingestion: Severe burns of mouth, throat, stomach.		
		Inhalation: Severe irritation or burns in respiratory tract and mucous mer	mbranes. Possible lung damage.	
4.4	Symptoms of Overexposure:	Eyes: Redness, burning, irritation, and swelling around eyes		
4.4		Skin: Redness, burning, itching, rash, blistering of skin.		
4.4		Ingestion: Nausea, vomiting, severe abdominal pain. Inhalation: Coughing, wheezing, swelling of throat, irritation in mucous m	a ambron ac difficulty broothing	
	Acute Health Effects:	Inhalation: Coughing, wheezing, swelling of throat, irritation in mucous meaning because the harmful if inhaled. Material is extremely destructive to the tissue of		iroton
	, logic from Endough	tract. May be harmful if swallowed. Causes burns. May be harmful if absorb		пасогу
4.5	Chronic Health Effects:	May damage the nervous system, kidney and/or liver.		
4.6	Target Organs:	Eyes, Skin, Nervous System, Kidneys, Liver, Respiratory System.		
	Medical Conditions		HEALTH	3
	Aggravated by Exposure:	organs (eyes, skin, and respiratory system) or impaired kidney function	FLAMMABILITY	0
		may be more susceptible to the effects of this substance.	PHYSICAL HAZARDS	2
			NO AND ANGLE STATE OF THE STATE	- 100
		-	PROTECTIVE EQUIPMENT	Н
4.8 N	Notes to Physician:	This would be contained to the contained	EYES   SKIN   LUNGS	
#.0 I	Notes to Physician.	This product contains <u>Selenious Acid</u> and is potentially fatal if ingested should be considered in asymptomatic or minimally symptomatic patients		
		edema and multi-organ failure may occur. 24/7 medical toxicology consultar		lonary
	-	,		
		5. FIREFIGHTING MEASURES		
5.1 F	Fire & Explosion Hazards:	Non-flammable. May react with metals to release hydrogen gas, which c	an form explosive mixtures	
		with air. May intensity fire; oxidizer. Keep/Store away from clothing/ combo	ustible materials.	
5.2 I	Extinguishing Methods:	Use fire-extinguishing media appropriate for surrounding materials.		
5.3 I	Firefighting Procedures:	As with any fire, firefighters should wear appropriate protective equipmen		
		approved or equivalent self-contained breathing apparatus (SCBA) and pr		2
		as for surrounding materials. Hazardous decomposition products m degradation may produce oxides of carbon, phosphorous, selenium and		5/
		and/or derivatives. Fire should be fought from a safe distance. Keep contain		1
		fire is out. Use water spray to cool fire-exposed surfaces and to protect p		
		Prevent runoff from fire control or dilution from entering sewers, drains, dr	inking water supply, or any	
		natural waterway.		
		6. ACCIDENTAL RELEASE MEASURE	S	
6.1	Spills:	Before cleaning any spill or leak, individuals involved in spill cleanup	5380	ective
		Equipment (PPE). Use safety glasses or safety goggles and face shield;		
		apron, boots, etc.) to prevent skin contact.		
		Small Spills: Wear appropriate protective equipment including gloves and		stible,
		inert material such as vermiculite or sand to soak up the product and place	111 CONTRACTOR OF THE PROPERTY	and the second
		Large Spills: Keep incompatible materials (e.g., organics such as oil) awa	(A)	
		or release. Isolate immediate hazard area and keep unauthorized personn done with minimal risk. Wear appropriate protective equipment including		
		Recover as much free liquid as possible and collect in acid-resistant conta		
		discharging liquid directly into a sewer or surface waters.	F	
	100 No. 10 Apr. 10 No.	7. HANDLING & STORAGE INFORMATION	ON	
7.1	Work & Hygiene Practices:	Avoid breathing mists or spray. Avoid eye and skin contact. Wear protectiv		
		of the reach of children. Do not eat, drink or smoke when handling this pro		
		expose to heat and flame. Use only in ventilated areas. Keep out of the decontaminate any spills or residues.	reach of children. Immediately clean-u	ih sud
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. Store in acid-resistant containers. Keep containers covered when		
		(120 °F). Keep away from incompatible substances (See Section 10). Prote		
7.3	Special Precautions:	Empty containers may retain hazardous product residues. Keep/Store awa		



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-4	Forest Contract	8. EXPOSURE CONT				ALEXAND FIRST ALE	\U   L \	1	*		OTHES
1	Exposure Limits: ppm (mg/m <sup>3</sup> )		AC	GIH T	× 1	NOHSC ES-	ES-		OSHA	1	OTHER
	ppin (ing/in )	CHEMICAL NAME(S)	TLV	STEL	ES-TWA	STEL	PEAK	PEL	STEL	IDLH	
		SELENIOUS ACID	(0.2)	NA	(0.2)	NF	NF	(0.2)	NA	NA	5
		NITRIC ACID	2	4	2	NF	NF	2	NA	25	
		CUPRIC SULFATE	(1)	NA	NF	NF	NF	(1)	NA	1000	
.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).									
.3	Respiratory Protection:	In instances where vapors or sprays of this product are generated, and respiratory protection is needed, use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or Australia.									
4	Eye Protection:	Safety glasses with side shields r shield is also recommended.	Safety glasses with side shields must be used when handling or using this product. A protective face								
.5	Hand Protection:	Wear protective, chemical-resistar	t gloves	(e.g., ned	oprene) wh	ien using	or handli	ng this pr	oduct.		
6	Body Protection:	A chemical resistant apron and/o product.	r protect	ive cloth	ing are re	commen	ded when	handling	g or usin	g this	40
		9. PHYSICAL	& CH	FMIC.	ΔΙ ΡΒά	)PFR	TIFS				
.1	Appearance:	Viscous blue liquid	J. J. I				~				
2	Odor:	Odorless									
3	Odor Threshold:	0.29 to 0.98 ppm (Nitric Acid)									
4	pH:	1.0									
5	Melting Point/Freezing Point:	NA									
6	Initial Boiling Point/Boiling	PRIMARIE TRADET IN DURANTHAN AND MA									
υ	Range:	> 100 °C (> 212 °F)									
7	Flashpoint:	Wax: 207 °C (405 °F) COC									
8	Upper/Lower Flammability	NA									
9	Limits: Vapor Pressure:	NA									
10	Vapor Density:	< 1.0 (air = 1.0)									
11	Relative Density:	1.017									
12	Solubility:	Insoluble (water); Soluble (isoprop	anol)								
13	Partition Coefficient (log Pnw):	NA	anoi)								
14	Autoignition Temperature:	- 6333									
15	Land the Control of Control Co	NA									
_	Decomposition Temperature:	NA									
16	Viscosity:	NA									
17	Other Information:	Evaporation Rate: < 1.0 (ethyl ethe	er = 1.0)								
		10. STA	BILIT	Y & R	EACTI'	VITY					
0.1	Stability:	Stable at normal temperatures.									
0.2	Hazardous Decomposition Products:	Reaction with organics and stroid decomposition may produce selen						nides an	d hydrog	jen sele	enide. Therr
0.3	Hazardous Polymerization:	Will not occur.									
).4	Conditions to Avoid:	Excessive heat, shock, friction.									
.5	Incompatible Substances:	Cyanides, water-reactive substan materials, most metals.	ces, stro	ong redu	cing agent	s, chlorin	ated clea	ners or	sanitizers	s, comb	ustible orga
		11. TOXICO	LOGI	CALI	NFOR		N				
.1	Routes of Entry:	Inhalation: YES		5	Absorption:	YES			Ingesti	on: YE	S
.2	Toxicity Data:	Cupric Sulfate: LD <sub>50</sub> (oral, rat) = 30	00 mg/kg								
.3	Acute Toxicity:	See Section 2.4									
.4	Chronic Toxicity:	See Section 2.5									
1.5	Suspected Carcinogen:	Selenious Acid is listed by IARC o					rcinogeni	city to hu	mans)		
1.6	Reproductive Toxicity:	This product is not reported to cau	CATCO HARVE AND	CONTRACTOR OF THE PARTY OF THE	CANADA CA	AT THE PARTY OF TH					
	Mutagenicity:	This product is not reported to pro-									
	Embryotoxicity:	This product is not reported to pro-				21-1-22-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1					
	Teratogenicity:	This product is not reported to cau	se terato	genic eff	ects in hun	nans.					
	Reproductive Toxicity:	This product is not reported to cau	manager and a second	Cronon and the same of the		Managaday - Kr					



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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision Date: 3/16/2017 SDS Revision: 2.0 11. TOXICOLOGICAL INFORMATION – cont'd 11.7 Imitancy of Product: See Section 4.2 118 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. Effects on Plants & Animals: There are no specific data available for this product. 12.3 Effects on Aquatic Life Very toxic to aquatic life with long lasting effects. 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 2. Any disposal practice must be in compliance with local, state, and federal laws and regulations. Contact the appropriate agency for specific information. Treatment, transport, storage and disposal of hazardous waste must be provided by a licensed facility or waste hauler. 13.2 Special Considerations U.S. EPA Hazardous Waste - Characteristic - Corrosive (D002), Characteristic - Toxic (D010) 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. 49 CFR (GND) UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC ACID), 8, II, (LTD QTY, IP VOL ≤ 1.0 L) 14.2 IATA (AIR) UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC ACID), 8, II, (LTD QTY, IP VOL  $\leq$  0.1 L) 14.3 IMDG (OCN): UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC ACID), 8, II, (LTD QTY, IP VOL ≤ 1.0 L) UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC TDGR (Canadian GND): 14.4 ACID), 8, II, (LTD QTY, IP VOL  $\leq$  1.0 L) 14.5 ADR/RID (EU): UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC ACID), 8, II, (LTD QTY, IP VOL ≤ 1.0 L) SCT (MEXICO) UN3264, LIQUIDOS, CORROSIVOS, ACIDO, INORGANICO, N.E.P. (ACIDO SELENIO, ACIDO 14.6 FOSFORICO), 8, II, (CANTIDAD LIMITADA, IP VOL ≤ 1.0 L) 14.7 ADGR (AUS): UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC ACID), 8, II, (LTD QTY, IP VOL ≤ 1.0 L) 15. REGULATORY INFORMATION SARA Reporting Requirements: 15.1 This product contains Nitric Acid, Cupric Sulfate and Selenious Acid, substances subject to SARA Title III, section 313 reporting requirements. 15.2 SARA TPQ: 302 TPQ (Nitric Acid): 1,000 lbs (454 kg) TSCA Inventory Status 15.3 The components of this product are listed on the TSCA Inventory. CERCLA Reportable Quantity: 15.4 Selenious Acid: 10 lbs (4.54 kg); Nitric Acid: 1,000 lbs (454 kg); Cupric Sulfate: 10 lbs (4.54 kg) Other Federal Requirements: 15.5 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 E (Corrosive Material). WHMIS Class D1 (Materials Causing Immediate and Serious Toxic Effects) 15.7 State Regulatory Information: Selenious Acid is found on the following state criteria lists: Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Minnesota Hazardous Substances List (MN), Pennsylvania Right-to-Know List (PA), and Wisconsin Hazardous Substances List (WI). Nitric Acid is found on the following state criteria lists: FL, MA, MN, New Jersey Right-to-Know List (NJ), PA, and Washington Permissible Exposures List (WA). 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).

NA

15.8

Other Requirements



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		16. OTHER INFO	ORMATION				
16.1	Other Information:	DANGER! TOXIC IF SWALLOWED. MAY CAUSE SEVERE SKIN BURNS OR EYE DAMAGE. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. Obtain special instructions befor use. Do not handle until all safety precautions have been read and understood. Keep/Store away from clothing combustible materials. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection face protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rins cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Collect spillage. KEEP LOCKED UP AND OUT OF REACH OF CHILDREN.					
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.					
16.3	Disclaimer:	government regulations must be reviewed for a Products, Inc.'s knowledge, the information cont suitability or completeness is not guaranteed ar The information contained herein relates only	OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other oplicability to this product. To the best of ShipMate's & Precision Brand ained herein is reliable and accurate as of this date; however, accuracy, and no warranties of any type, either expressed or implied, are provided to the specific product(s). If this product(s) is combined with other sidered. Data may be changed from time to time. Be sure to consult the				
16.4	Prepared for:	Precision Brand Products, Inc. 2250 Curtiss Street Downers Grove, IL 60515 USA Tel: +1 (630) 969-7200 Fax: +1 (630) 969-0310 http://www.precisionbrand.com	PRECISION BRAND.				
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	ShipMate*  Dangerous Goods Training & Consulting				



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SDS Revision: 2.0

SDS Revision Date: 3/16/2017

### **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:

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:**

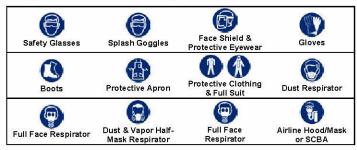
0	Minimal Hazard					
1	1 Slight Hazard					
2	Moderate Hazard					
3	Severe Hazard					
4	Extreme Hazard					



#### PERSONAL PROTECTION RATINGS:

Α	
В	
С	
D	
E	
F	

G			8	
Н				8
Ĩ			8	
J			•	8
K	8			(3)
Х	Consult special	your sup	ervisor or directions	SOPs fo



#### OTHER STANDARD ABBREVIATIONS:

Carc	Carcinogenic				
Irrit	Imitant				
NA	Not Available				
NR	NR No Results				
ND	Not Determined				
NE	NE Not Established				
NF	NF Not Found				
SCBA	Self-Contained Breathing Apparatus				
Sens	Sensitization				
STOT RE	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	W. 441144 B. 1987
1	Slight Hazard	FLAMMABILITY
2	Moderate Hazard	REACTIVITY
3	Severe Hazard	
4	Extreme Hazard	
ACD	Acidic	
ALK	Alkaline	
COR	Corrosive	<b>─</b>
₩	Use No Water	HEALTH
ОХ	Oxidizer	SPECIAL
TREFOIL	Radioactive	PRECAUTIONS

#### TOXICOLOGICAL INFORMATION:

LD <sub>50</sub>	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 <sub>lo</sub>	Lowest dose to cause a symptom				
TCLo	Lowest concentration to cause a symptom				
TD <sub>lo</sub> , LD <sub>lo</sub> , & LD <sub>o</sub> or	Lowest dose (or concentration) to cause lethal or toxic effects				
TC, TCo, LCio, & LCo	47 (5)				
IARC	International Agency for Research on Cancer				
NTP	National Toxicology Program				
RTECS	Registry of Toxic Effects of Chemical Substances				
BCF	Bioconcentration Factor				
TLm	Median threshold limit				
log K <sub>ow</sub> orlog 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:

0	<b>(4)</b>	<b>(S)</b>	(%)	<b>(</b>	<b>®</b>		
Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compressed	Flammable	Oxidizing	Taxic	Irritation	Infectious	Corrosive	Reactive

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

		<b>③</b>	$\Diamond$			$\Diamond$		<b>(</b>
GHS01	GH502	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GH509
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Hamful Irritating	Health Hazard	Environment