SAFETY DATA SHEET

Page 1 of 6 HFT-45431

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision: 1.1 SDS Revision Date: 7/25/2015 1. PRODUCT & COMPANY IDENTIFICATION 1.1 Product Name: 4-1/2 IN 40 GRIT MASONRY CUT-OFF WHEEL 10 PC 1.2 Chemical Name: Aluminum Oxide 1.3 Synonyms P/N 45431 1.4 Trade Names: Warrior 1.5 Product Uses & Restrictions: Abrasive Wheel 1.6 Distributor's Name: Harbor Freight Tools USA, Inc. Distributor's Address: 1.7 26541 Agoura Road, Calabasas, CA 91302 USA Emergency Phone: CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300 (CCN 676687) 1.8 19 Business Phone / Fax: +1 (805) 388-1000 2. HAZARDS IDENTIFICATION Hazard Identification: This product is classified as a HAZARDOUS SUBSTANCE but not as DANGEROUS GOODS 2.1 according to the classification criteria of NOHSC: 1088 (2004) and ADG Code (Australia). WARNING! MAY CAUSE AN ALLERGIC SKIN REACTION. MAY BE HARMFUL IF INHALED. Classification: Skin Sens. 1B; Acute Tox. Inh. 5 Hazard Statements (H): H317 - May cause an allergic skin reaction. H333 - May be harmful if inhaled. Precautionary Statements (P): P261 – Avoid breathing dust. P304 + P312 – IF INHALED: Call a POISON CENTER/doctor if you feel unwell. P280 - Wear protective gloves/eye protection/face protection. P302+P352 - IF ON SKIN - Wash with soap and water. P333+P313 - If skin irritation occurs: Get medical advice/attention. P501 - Dispose of contents/container to a licensed treatment, storage or disposal facility (TSDF) 3. COMPOSITION & INGREDIENT INFORMATION EXPOSURE LIMITS IN AIR (mg/m³) ACGIH NOHSC OSHA ppm ppm ppm ES ES-ES-STEL CHEMICAL NAME(S) CAS No. RTECS No. EINECS No. % TLV STEI TWA STEL PEAK PEL IDLH OTHER 1344-28-1 BD1200000 215-691-6 60-100 (10) NA NF NF NF (10) NA NA ALUMINUM OXIDE Skin Sens. 1B; Acute Tox. Inh. 5; H317, H333 10-30 NA NA NF NF NF NA NA NA 9003-35-4 NA 500-005-2 PHENOLIC RESIN EW4150000 NA NA NF NF NF NA NA 1010-41-4 231-900-3 1-5 NA CALCIUM SULFATE DIHYDRATE 4. FIRST AID MEASURES Ingestion unlikely; however, if ingested, do not induce vomiting. Contact the nearest Poison Control Center 4.1 First Aid: Ingestion: or local emergency number. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. If product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes lifting Eyes: upper and lower lids, occasionally. Wash thoroughly with soap and water. In case of contact, immediately flush skin with plenty of water for at <u>Skin</u>: least 15 minutes. Inhalation: Remove victim to fresh air at once. If breathing is difficult, administer oxygen. If breathing stops give artificial respiration. Keep person warm, quiet and get medical attention. Effects of Exposure: 4.2 If product is swallowed, may cause gastrointestinal disturbance. Ingestion: Exposure to dust may cause eye irritation. Symptoms of overexposure may include redness, itching, Eyes: irritation and watering. Skin: May be irritating to skin. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some sensitive individuals. Coughing, wheezing, shortness of breath, impaired pulmonary function. Irritation or soreness in throat, Inhalation: nose and respiratory tract. 4.3 Symptoms of Overexposure: If product is swallowed, may cause gastrointestinal disturbance. Ingestion: Eyes: Exposure to dust may cause eye irritation. Symptoms of overexposure may include redness, itching, irritation and watering. Skin: May be irritating to skin. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some sensitive individuals. Inhalation: Coughing, wheezing, shortness of breath, impaired pulmonary function. Irritation or soreness in throat, nose and respiratory tract.

SAFETY DATA SHEET

Page 2 of 6 **HFT-45431**

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

SDS Revision: 1.1

SDS Revision Date: 7/25/2015

		4. FIRST										
4.4	Acute Health Effects:	Non-irritating when used as directed. Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of dust can cause coughing, wheezing, shortness of breath, impaired pulmonary function. Irritation or soreness in throat, nose and respiratory tract.										
4.5	Chronic Health Effects:	Non-irritating when used as direct			llergic der	matitis in s	some sensiti	ve indi	/iduals			
4.6	Target Organs:	Eyes, Skin, Lungs, Respiratory S										
4.7	Medical Conditions	Pre-existing dermatitis, other skir		ons.			HEAL	ТН				1
	Aggravated by Exposure:	5					FLAM		ITY			0
							PHYS			202		0
										JIPMEN	IT	B
										JIPIVIER		D
							EYES	3	KIN			
	5. FIREFIGHTING MEASURES											
5.1	Fire & Explosion Hazards:	This material can burn but will decompose at high temperature thermal decomposition can proc Formaldehyde, Carbon Monoxide Carbon dioxide in sufficient conc	s to forr luce the e and/or entration	n toxic followin carbon can act	gases (e. ng combu dioxide. C t as an as	.g., CO, C stion or d arbon Mor phyxiant.	O ₂ , Hydroca ecompositio	arbons) n prod	Burr ucts: P	ing or henol,		
5.2	Extinguishing Methods:	CO ₂ , Dry Chemical, Foam. Use										
5.3	Firefighting Procedures:	Keep containers cool until well after the fire is out. Fight fires as for surrounding materials. As in any fire, wear MSHA/NIOSH approved self-contained breathing apparatus (pressure-demand) and full protective gear. Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personnel. Fight fire upwind. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.										
		6. ACCIDEN	TAL I	RELE		MEASL	JRES					
6.1	Spills:	Before cleaning any spill individuals involved in cleanup must wear appropriate Personal Protective Equipment. Plastic or rubber gloves, respirator, eye protection and apron may be required for clean-up of large spills. No special precautions are required for intact packaging containing this product. If product is crushed, use respiratory protection equipment. Do not use compressed air to clean up any residue. Use a wet method or vacuums equipped with High Efficiency Particulate (HEPA) filters to clean up any residues from this product. Waste must be placed in dust tight containers or sealed plastic bags for disposal. Label properly. Keep spills and cleaning runoffs out of drains, municipal sewers and open bodies of water.										
		7. HANDLING	9 CT									
7.1	Work & Hygiene Practices:								a coor	andwar	mwatar	
7.2	Storage & Handling:	Do not eat, drink or smoke when handling this product. Wash unintentional residues with soap and warm water. Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans) away from heat and direct sunlight. Avoid temperatures above 120 °F. Keep away from incompatible substances.										
7.3	Special Precautions:	Clean all dusts and particulates p										
			lemptry		p							
		8. EXPOSURE CON		5 & F	PERSC				N			
8.1	Exposure Limits:		ACG		LINOC	NOHSC	NOTEC		OSHA		OTHER	
0.1	ppm (mg/m ³)								STE		U THER	
		CHEMICAL NAME(S)	TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	L	IDLH		
8.2	Ventilation & Engineering Controls:	ALUMINIUM OXIDE General mechanical (e.g., fans) exhaust ventilation to effectively appropriate decontamination equ	remove	and pre	event buil	dup of du	sts generate	d from	the us	e of this		
8.3	Respiratory Protection:	appropriate decontamination equipment is available (e.g., sink, safety shower, eye-wash station). In instances where dusts are generated when using this product, 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 DATA SHEET

Page 3 of 6 HFT-45431

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

SDS Revision: 1.1

SDS Revision Date: 7/25/2015

		8. EXPOSURE CONTROLS & PERSONAL PROTECTION	
8.4	Eye Protection:	Avoid eye contact. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).	
8.5	Hand Protection:	Heavy-duty work gloves recommended under normal conditions of use to avoid abrasions and reduce risk of exposure to hands. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, or the EU member states.	
8.6	Body Protection:	No apron required under normal circumstances; however, it is recommended. Upon completion of work activities using this product), wash any exposed areas thoroughly with soap and water. If necessary, refer to appropriate standards of Canada, the EU member states, or U.S. OSHA.	
	•		

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Dark brown to black solid article
9.2	Odor:	Odorless
9.3	Odor Threshold:	NA
9.4	pH:	NA
9.5	Melting Point/Freezing Point:	2100 °C (3812 °F) – Alumina
9.6	Initial Boiling Point/Boiling Range:	NA
9.7	Flashpoint:	ΝΑ
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	ΝΑ
9.11	Relative Density:	2.0
9.12	Solubility:	Insoluble
9.13	Partition Coefficient (log Pow):	ΝΑ
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	NA
9.17	Other Information:	NA

10. STABILITY & REACTIVITY

10.1	Stability:	Stable under normal conditions.
10.2	Hazardous Decomposition Products:	Oxides of carbon (CO, CO ₂), metal oxides, particulates.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Open flames, high heat, incompatible substances and direct sunlight.
10.5	Incompatible Substances:	Avoid extreme heat and ignition sources. Store away from oxidizers, strong acids and alkalis.

11. TOXICOLOGICAL INFORMATION

			0/1100000							
11.1	Routes of Entry:	Inhalation:	YES	Absorption:	YES	Ingestion:	YES			
11.2	Toxicity Data:			nimals to obtain toxicolo the product, but is not p			entific literature, is			
11.3	Acute Toxicity:	See Section 4.4	see Section 4.4							
11.4	Chronic Toxicity:	See Section 4.5	See Section 4.5							
11.5	Suspected Carcinogen:	NA	NA							
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 repo	rted to cause ter	atogenic effects in huma	ns.					
	Reproductive Toxicity:	This product is not repo	rted to cause rep	productive effects in hum	ans.					
11.7	Irritancy of Product:	The product can cause	allergic skin read	tions (e.g., rashes, welts	s, dermatitis) up	on prolonged or repeate	ed exposure.			
11.8	Biological Exposure Indices:	NE					•			
11.9	Physician Recommendations:	Treat symptomatically.	Treat symptomatically.							

SAFETY DATA SHEET

Page 4 of 6 HFT-45431

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision: 1.1 SDS Revision Date: 7/25/2015 **12. ECOLOGICAL INFORMATION** 12.1 Environmental Stability: There are no specific data available for this product. 12.2 Effects on Plants & Animals: There are no specific data available for this product. 12.3 Effects on Aquatic Life: There are no specific data available for this product. 13. DISPOSAL CONSIDERATIONS 13.1 Waste Disposal: Dispose of in accordance with federal, state, provincial and local regulations. 13.2 Special Considerations: NA 14. TRANSPORTATION INFORMATION The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR. 49 CFR (GND): NOT REGULATED 14.1 14.2 IATA (AIR): NOT REGULATED 14.3 IMDG (OCN): NOT REGULATED TDGR (Canadian GND): 14.4 NOT REGULATED ADR/RID (EU): 14.5 NOT REGULATED SCT (MEXICO): 14.6 NOT REGULATED 14.7 ADGR (AUS): NOT REGULATED **15. REGULATORY INFORMATION** SARA Reporting 15.1 This product contains Aluminum Oxide, a substance subject to SARA Title III, Section 313 reporting requirements. Requirements 15.2 SARA Threshold Planning There are no specific Threshold Planning Quantities for the components of this product. Quantity: 15.3 TSCA Inventory Status: The components of this product are listed on the TSCA Inventory or are otherwise exempt. 15.4 CERCLA Reportable Quantity NA (RQ): Other Federal Requirements: None of the ingredients are listed as Hazardous Air Pollutants (HAPs). None of the ingredients are listed as Toxic 15.5 Pollutants under the Clean Water Act (CWA). None of the ingredients are listed as Priority Pollutants under the Clean Water Act (CWA). This product does not contain any Class 1 or Class 2 ozone depletors. 15.6 Other Canadian Regulations: This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. WHMIS D2B (Other Toxic Effects). 15.7 State Regulatory Information: Alumina (Aluminum Oxide) is found on the following state criteria list: Massachusetts Hazardous Substances List (MA, Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), 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). NOTE: This product contains a substance(s) known to the State of California to cause cancer, birth defects, or other reproductive harm. 15.8 Other Requirements: The primary components of this product are listed in Annex I of EU Directive 67/548/EEC: Harmful (Xn). Risk Phrases (R): 20-38 - Harmful if inhaled. Irritating to skin. Safety Phrases (S): 2-23-24-62 - Keep away from children. Do not breathe dust. Avoid contact with skin. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label where possible.

HARBOR FREIGHT TOOLS Quality Tools at Ridiculously Low Prices

SAFETY DATA SHEET

Page 5 of 6 **HFT-45431** 00040

Prepa	ared to OSHA, ACC, ANS	SI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards	SDS Revision: 1.1	SDS Revision Date: 7/25/2015					
		16. OTHER INFO	DRMATION						
16.1	Other Information:	 WARNING! MAY CAUSE AN ALLERGIC SKIN REACTION. MAY BE HARMFUL IF INHALED. Avoid breathing dust. IF INHALED: Call a POISON CENTER/doctor if you feel unwell. Wear protective gloves/eye protection/face protection. IF ON SKIN – Wash with soap and water. If skin irritation occurs: Get medical advice/attention. KEEP OUT OF REACH OF CHILDREN. NOTE: This product contains a substance(s) known to the State of California to cause cancer, birth defects, or other reproductive harm. 							
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. Oth government regulations must be reviewed for applicability to this product. To the best of ShipMate's & Harbor Freig Tools USA, Inc.'s knowledge, the information contained herein is reliable and accurate as of this date; howev accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, a provided. The information contained herein relates only to the specific product(s). If this product(s) is combined w other materials, all component properties must be considered. Data may be changed from time to time. Be sure consult the latest edition.							
16.4	Prepared for:	Harbor Freight Tools USA, Inc. 26541 Agoura Road Calabasas, CA 91302 USA Tel: +1 (805) 388-1000 http://www.harborfreight.com	HARBOR FREIGHT TOOLS Quality Tools at Ridiculously Low Prices						
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							

SAFETY DATA SHEET

Page 6 of 6 HFT-45431

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

SDS Revision: 1.1

SDS Revision Date: 7/25/2015

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:

Г CAS No. Chemical Abstract Service Number

EXPOSURE LIMITS IN AIR:						
ACGIH	American Conference on Governmental Industrial Hygienists					
C	Ceiling Limit					
ES	Exposure Standard (Australia)					
IDLH	Immediately Dangerous to Life and Health					
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 CPR stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.

HMIS-	HMIS-III HEALTH, FLAMMABILITY & REACTIVITY RATINGS:								
0	Minimal Hazard		HEALTH						
1	Slight Hazard		FLAMMABILITY						
2	Moderate Hazard		PHYSICAL HAZARDS						
3	Severe Hazard		PERSONAL PROTECTION						
4	Extreme Hazard								

PERSONAL PROTECTION RATINGS:

LEL UEL

Α						G		E			
в						Н					8
С						I					
D	B					J		(Ty	1		
Е						Κ	5				
F			F.I			Х			our supervisor or SOPs f Indling directions.		
Sa	Safety Glasses Splash Goggles					Face Shield & Protective Eyewear			Gloves		
	Boots		Syntheti	c Apron	Pro		tive Cloth	ing	Dust R) espi	rator
Dust & Vapor Half-					Full Face			Airline Hood/Mask			
Full Face Respirator Data & Respirator Full Face Respirator OTHER STANDARD ABBREVIATIONS: Content of the standard stan									or S	SCB	Α
ML Maximum Limit											
mg/m3 milligrams per cubic meter											
NA Not Available											
	ND	Not D	etermined								
	NE	Not Es	stablished								
	NF	Not Fo	bund								
1											

NA	Not Available					
ND	Not Determined					
NE	Not Established					
NF	Not Found					
NR	No Results					
ppm	parts per million					
SCBA	Self-Contained Breathing Apparatus					
NATIONAL FI	RE PROTECTION ASSOCIATION: NFPA					
FLAMMABILI	TY LIMITS IN AIR:					
Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition					

explode or ignite in the presence of an ignition source

Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source $% \left({{{\rm{D}}_{\rm{T}}}} \right) = {{\rm{D}}_{\rm{T}}} \left({{{\rm{D}}_{\rm{T}}}} \right) = {{{\rm{D}}_{\rm{T}}}} \left({{{\rm{D}}_{\rm{T}}}} \right) = {{{\rm{D}}_{\rm{T}}}}$

Upper Explosive Limit - highest percent of vapor in air, by volume, that will

CO	R Corrosiv	osive					HEALTH						
v	Use No	Water								CIAL			
0	X Oxidizer						SPECIAL						
TREFO	L Radioac	Radioactive											
TOXICOL	OGICAL I	NFORM	IATI	ON:									
	LD ₅₀ Lethal Dose (solids & s					iiqui	ids) whi	ich k	ills 50%	of the expos	ed animals		
	LC	C ₅₀ Let	hal co	oncentr	ation	(gase	es) whic	h kil	ls 50% of	f the exposed	d animal		
	рр	m Cor	Concentration expressed in parts of material per million parts										
	TI	D _{Io} Lov	Lowest dose to cause a symptom										
	TC	Lo Lov	vest c	oncen	tration	to ca	ause a	symp	otom				
	LD _{lo} , & LD _o		vest d	lose (o	r conc	entra	ation) to	cau	se lethal	or toxic effect	rts		
TC, TC	C _o , LC _{io} , & L												
	IAF		International Agency for Research on Cancer										
-				Toxico		-							
	RTEC						f Chem	ical	Substand	ces			
				entratic									
				hresho									
	K _{ow} or log K				il/Wat	er Di	stributio	n					
-	TORY INF												
WHMI						ateri	al Inforr	natio	on Syster	n			
DO	T U.S. De	partment	of Tr	anspor	tation								
T	C Transpo	rt Canad	а										
EP	U.S. En	vironmen	mental Protection Agency										
DS	L Canadia	n Domes	nestic Substance List										
NOHS	C National	l Occupa	tional	Health	n and S	Safet	y Comr	nissi	on (Austr	ralia)			
NDS	n Non-D	on-Domestic Substance List											
PS	L Canadia	n Priority	riority Substances List										
TSC	A U.S. Tox	kic Subst	Substance Control Act										
E	J Europea	an Union	(Euro	pean l	Jnion	Direc	tive 67	/548/	/EEC)				
WG	K Wasser	gefährdu	ngskla	assen	(Germ	an W	/ater Ha	azaro	d Class)				
HMIS-I	II National	Paint &	Coati	ngs As	sociat	ion H	lazardo	us N	Aaterials	Identification	System		
WORKPL	ACE HAZ	ARDOU	IS M	ATER	IALS	IDE	ENTIFI	CA.	TION (V	VHMIS) SY	STEM:		
\bigcirc	۲	٩)			(Ð	(۲		Ŕ		
Class A	Class B	Class	С	Class	D1	Clas	ss D2	Cl	ass D3	Class E	Class F		
Compressed	Flammable	Oxidizir	ng	Toxi	с	Irrit	ation	Inf	ectious	Corrosive	Reactive		
EC (67/54	8/EEC) IN	FORM/		N:									
		N	,	¥	2			×					
с	E	E F N			0 т		т	Xi	Xn				
Corrosive	Explosive	Flamma	ible	Harm	ful	Oxi	dizing	-	Toxic	Irritant	Harmful		
CLP/GHS	(1272/200	08/EC) I	ыст	OGR	AMS:						I		
GHS01	GHS02	GHS03		> IS04	GHS	205	GHS		GHS07	GHS08	GHS09		
01001	011002	01000	0	+	313		01130		0.007	01000	0.1003		

HAZARD RATINGS:						
0	Minimal Hazard					
1	Slight Hazard					
2	Moderate Hazard					
3	Severe Hazard					
4	Extreme Hazard					
ACD	Acidic					
ALK	Alkaline					
COR	Corrosive					
₩	Use No Water					
ox	Oxidizer					
TREFOIL	Radioactive					



	LC ₅₀	Lethal concentration (gases) which kills 50% of the exposed animal				
	ppm	Concentration expressed in parts of material per million parts				
TD _{io}		Lowest dose to cause a symptom				
TCLo		Lowest concentration to cause a symptom				
TD _{io} , LD _{io} , & LD _o or		Lowest dose (or concentration) to cause lethal or toxic effects				
TC, TC _o , LC _{lo} , & LC _o						
	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 _{ov}	w or log K _{oc}	Coefficient of Oil/Water Distribution				
REGULATO	ORY INFOR	MATION:				
WHMIS	Canadian Workplace Hazardous Material Information System					
DOT	U.S. Department of Transportation					
тс	Transport Canada					
EPA	U.S. Environmental Protection Agency					
DSL	Canadian Domestic Substance List					
NOHSC	National Occupational Health and Safety Commission (Australia)					
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)					
HMIS-III	National Paint & Coatings Association Hazardous Materials Identification System					

WORKFEACE HAZARDOUS MATERIALS IDENTIFICATION (WHIMIS) STSTEM.								
\bigcirc	۲	٨	۲	1	۲		Ŕ	
Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F	
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive	
EC (67/548/EEC) INFORMATION:								

		×	¥	0	*	×	×
с	E	F	Ν	0	т	Xi	Xn
Corrosive	Explosive	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful

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