

Page 1 of 6

BC-033 Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.1 SDS Revision Date: 11/29/2018 1. PRODUCT & COMPANY IDENTIFICATION SIGHT BLACK[™] AEROSOL 1 1 Product Name: 1.2 Chemical Name: Aerosol 1.3 Synonyms 33915, 33940 Trade Names: Sight Black[™] Aerosol 1.4 Product Use: 1.5 Stops glare on metal surfaces Distributor's Name: 1.6 Birchwood Casey, LLC Distributor's Address: 3260 Winpark Drive, New Hope, MN., 55427 USA 1.7 1.8 Emergency Phone: ChemTrec +1 (800) 424-9300 / +1 (703) 527-3887 or Poison Control Center +1 (866) 291-7152 +1 (952) 388-6717 1.9 Business Phone / Fax: 2. HAZARDS IDENTIFICATION 2.1 Hazard Identification: This product is classified as a hazardous substance and as dangerous goods according to the classification criteria of [NOHSC: 1088 (2004)] and ADG Code (Australia). DANGER! EXTREMELY FLAMMABLE AEROSOL. PRESSURIZED CONTAINER MAY BURST IF HEATED. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. CAUSES SKIN IRRITATION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS Classification: Aerosol 1; Flam. Liq. 3; Asp. Tox. 1; Skin Sens.2; Eye Irrit. 2. 2.2 Label Elements: Hazard Statements (H): H222 - Extremely flammable aerosol. H229 - Pressurized container may burst if heated. H304 - May be fatal if swallowed and enters airways. H315 - Causes skin irritation. H319 - Causes serious eye irritation. Precautionary Statements (P): P210 - Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking. P211 – Do not spray on an open flame or other ignition source. P251 – Do not pierce or burn, even after use. P261 – Avoid breathing fume/gas/mist/vapors/spray. P264 – Wash thoroughly with soap and water after handling. P270 – Do not eat, drink or smoke when using this product. P271 - Only use outdoors or in a wellventilated area. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P331 - Do NOT induce vomiting. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P321 -Specific treatment - See Section 4 of this Safety Data Sheet. P332+P313 - If skin irritation occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P304+P340 - IF INHALED: Remover person to fresh air and keep comfortable for breathing. P312 - Call a POISON CENTER/doctor if you feel unwell. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: get medical advice/attention. P403+P235 - Store in a well-ventilated place. Keep cool. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °F (122 °F). P405 - Store locked up. P501 -Dispose of contents/container to licenses treatment, storage and disposal facility (TSDF). 2.3 Other Warnings: WARNING: This product can expose you to chemicals including n-Hexane and Carbon Black, which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov. 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)								
					AC	GIH		NOHSC			OSHA	1	
					pp	m		ppm			ppm		
CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	TLV	STEL	ES- TWA	ES- STEL	ES- PEAK	PEL	STEL	IDLH	OTHER
n-HEXANE	110-54-3	MN9275000	203-777-6	40-60	50	1000	20	72	NF	500	NA	1100	
II-HEAANE	Flam. Liq. 2; A	Flam. Liq. 2; Asp. Tox.1; Skin Irrit. 2; STOT SE3; Repr. 2; STOT RE2; Chronic Aq. Tox. 2; H225, H304, H315, H336, H361, H373, H411											
PROPANE	74-98-6	TX2275000	200-827-9	25-35	1000	NA	1000	NF	NF	1000	NA	2100	
PROPANE	Flam. Gas 1;	Flam. Gas 1; Press. Gas; H220											
BUTANE	106-97-8	EJ4200000	203-448-7	10-25	1000	900	800	1900	NF	NA	NA	1900	
BUTAINE	Press. Gas; F	Press. Gas; Flam. Gas 1; H220											
CARBON BLACK	1333-86-4	FF5800000	215-609-9	1-3	(3.5)	NA	(3.5)	NF	NF	(3.5)	NA	NA	Resp.



Page 2 of 6 **BC-033**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.1 SDS Revision Date: 11/29/2018

		1	4. FIRST AID MEASURES	
4.1	First Aid:	Ingestion:	DO NOT INDUCE VOMITING. Contact the nearest Poisor number for assistance and instructions. Seek immediate vomiting occurs spontaneously, keep victim's head lowered If product gets in the eyes, flush eyes thoroughly with con-	medical attention. Do not induce vomiting. If (forward) to reduce the risk of aspiration.
		Eyes:	holding eyelid(s) open to ensure complete flushing. Rir Remove contact lenses, if present and easy to do. Continu	nse cautiously with water for several minutes. e rinsing.
		Skin:	If irritation occurs & product is on the skin, rinse thoroughl washing of the affected area with plenty of soap and wate footwear and wash thoroughly before reuse. If irritation, reimmediately.	r. Remove all contaminated clothing, including edness or swelling persists, consult a physician
4.0	F#sats of Familia	Inhalation:	Remove victim to fresh air at once. Under extreme c respiration. Seek immediate medical attention.	
4.2	Effects of Exposure:	Ingestion:	If product is swallowed, may cause nausea, vomiting depression.	·
		Eyes:	Moderately irritating to the eyes. The vapor is discomforti include redness, itching, irritation and watering.	
		Skin:	May be irritating to skin, especially after prolonged contact (e.g., rashes, welts, dermatitis) upon prolonged or repeated	
		Inhalation:	Vapors of this product may be moderately irritating to the system. Symptoms of overexposure can include coughi breathing. Inhalation of concentrated vapors can cau drowsiness, dizziness, headaches, nausea). Odor may gi may occur. The dried film of this product may become grinding.	ing, wheezing, nasal congestion, and difficulty se central nervous system depression (e.g., ve some warning of exposure, but odor fatigue
4.3	Symptoms of Overexposure:	contact may redness, itc	of skin overexposure may include redness, itching, and irritate result in defatting and drying of the skin which may result in thing and watering. Symptoms of inhalation may be eving intoxication. In extreme cases, unconsciousness and death	n dermatitis. Overexposure in eyes may cause denced by headache, dizziness, nausea and
4.4	Acute Health Effects:		ritation to eyes and skin near affected areas. Additiona dizziness, headaches and nausea.	ally, high concentrations of vapors can cause
4.5	Chronic Health Effects:	The materia cause centra	I may accentuate any pre-existing dermatitis condition. Inha al nervous system depression and may be associated with ca	
4.6	Target Organs:	Eyes, Skin,		
4.7	Medical Conditions Aggravated by Exposure:	organs (eyes	dermatitis, other skin conditions, and disorders of the target s, skin) or impaired kidney function may be more susceptible	
		to the effects	s of this substance.	PHYSICAL HAZARDS 0
				PROTECTIVE EQUIPMENT B
				EYES SKIN LUNGS
			5. FIREFIGHTING MEASURES	
5.1	Fire & Explosion Hazards:	DANGER!	HIGHLY FLAMMABLE LIQUID AND VAPOR! Keep aw	vay from heat, lit cigarettes.
	5	sparks & op	en flame. Keep container closed.	
5.2	Extinguishing Methods: Firefighting Procedures:		(if permitted), Dry Chemical, Foam, as authorized. t is a Class IB flammable liquid. When involved in a fire, this	and the state of the second state of the secon
0.0	Thoughting () seeds to	decompose source of igr First respor	to produce carbon oxides. Vapors of this product are heavienition and flash back to a leaking or open container. Inders should wear eye protection. Structural firefighters quipment. Use a water spray or fog to reduce or direct	must wear SCBAs and full
		effective in a	actually extinguishing a fire involving this product.	L
			6. ACCIDENTAL RELEASE MEASURE	ES
6.1	Spills:	Before clear Equipment.	ning any spill or leak, individuals involved in spill cleanu	
		ventilation (c and place in federal regul contaminate	<u>bills</u> (e.g., <1 gallon) wear appropriate personal protective pen doors and windows) and secure all sources of ignition. Into appropriate closed container(s) for disposal. Dispose cations. Wash all affected areas and outside of container with disposal disposal wash thoroughly before reuse.	Remove spilled material with absorbent material of properly in accordance with local, state and h plenty of warm water and soap. Remove any
		or earth). Us and solid dik	ills ≥ 1 gallon, deny entry to all unprotected individuals. Dike se ONLY non-sparking tools for recovery and cleanup. Tran ing material to separate containers for proper disposal. Remarkareas with soap and water. Keep spills and cleaning runo	sfer liquid to containers for recovery or disposal move contaminated clothing promptly and wash



Page 3 of 6

BC-033

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.1 SDS Revision Date: 11/29/2018

		51, NOTICE, WITHING, GITC & 1272/2		2101.100.10		DO INEVI	0.01.1	102	- 11011011		11/29/2010
		7. HANDLING	& STO	ORAG	E INFO	ORMA	TION				
7.1	Work & Hygiene Practices:	Avoid prolonged contact with th ventilated location (e.g., local exhusing this product. If necessary, to	is materia aust vent	al. Avoi ilation, fa	d breathin ans). Wasl	g the va h expose	pors gene d skin tho	roughly w	ith plent	y of soap	& water after
7.2	Storage & Handling:	Use and store in a cool, dry, we heat, open flames, sparks, and Section 10. Do not store in dama not in use. Open slowly on a letherefore, empty containers should face, this product should not be st	other pos ged or un evel, stabled d be hand	ssible so marked e surfac dled with	urces of ig containers e. Empty care. As a	gnition. or storag containe a precaut	Keep awage devices may continued to the	ay from i Keep contain res st exposu	ncompate ontainers sidual ar	tible mate s securely nounts of eyes, no	erials listed in y closed when f this product;
7.3	Special Precautions:	Do not store where temperature unattended. Clean all spills prom		ceed 50	°C (122 °	F). Spill	ed materi	al may p	resent a	slipping	hazard if left
		8. EXPOSURE CONT	ROLS	& PE	RSON	AL PI	ROTEC	CTION			
8.1	Exposure Limits:			GIH		NOHSC		1	OSHA		OTHER
	ppm (mg/m³)	0.15-110-11-11-12-(0)			50 TW	ES-	ES-				
		n-HEXANE	TLV 50	STEL 1000	ES-TWA 20	STEL 72	PEAK NF	PEL 500	STEL NA	1100	+
		PROPANE	1000	NA	1000	NF	NF	1000	NA NA	2100	
		BUTANE	1000	900	800	1900	NF	NA	NA	1900	
		CARBON BLACK	(3.5)	NA	(3.5)	NF	NF	(3.5)	NA	NA	Resp.
8.2	Ventilation & Engineering Controls:	Use local or general exhaust ven handling of this product. Ensure a station).									
8.3	Respiratory Protection:	No special respiratory protection instances where vapors or spray use only protection authorized by CAS Standard Z94.4-93 and ap Australia.	s of this p	oroduct a 1910.13	are genera 4, applicat	ted, and ole U.S. S	respirator State regul	y protect ations, o	ion is ne r the Car	eeded, nadian	
8.4	Eye Protection:	Wear protective eyewear (e.g., say Always use protective eyewear value soft lenses may absorb and concerns.	vhen clea	ning spil						oduct. azard;	
8.5	Hand Protection:	If anticipated that prolonged & reprubber gloves for routine industrappropriate standards of Canada,	oeated sk ial use.	in contact	sary, refe						
8.6	Body Protection:	No special body protection is req	No special body protection is required under typical circumstances of use and handling. If necessary, refer to appropriate standards of Canada, the E.C. member states, or U.S. OSHA.								
		O DUVCICAL	0 011		AL DD		TIEC				
9.1	Appearance:	9. PHYSICAL	& CH		AL PRO	OPER	IIE2				
9.2	Odor:	Aerosol liquid									
9.3	Odor Threshold:	Slight solvent odor NA									
9.4	pH:										
9.5	Melting Point/Freezing Point:	NA NA									
9.6	Initial Boiling Point/Boiling Range:	- 42.2 to -178.8 °C (- 44 to - 290 °C	'F)								
9.7	Flashpoint:	- 104.44 °C (- 156 °F), based on p	propellant								
9.8	Upper/Lower Flammability	UEL 15% / LEL 1.9%									
9.9	Limits: Vapor Pressure:										
9.10	Vapor Density:	55 psig									
9.11	Relative Density:	> 1 (Air = 1)									
9.12	Solubility:	< 1 Negligible									
	Partition Coefficient (log P _{ow}):	NA									
9.13		1 11/0									
9.13											
9.14	Autoignition Temperature:	NA									
9.14 9.15	Autoignition Temperature: Decomposition Temperature:	NA NA									
9.14	Autoignition Temperature:	NA									



14.7

ADGR (AUS):

SAFETY DATA SHEET

Page 4 of 6

BC-033 Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision Date: 11/29/2018 SDS Revision: 1.1 10. STABILITY & REACTIVITY 10 1 Stability: Relatively stable under ambient conditions when stored properly. 10.2 Hazardous Decomposition If exposed to extremely high temperatures, products of thermal decomposition may include irritating vapors and toxic Products: gases (e.g., oxides of carbon & nitrogen). 10.3 Hazardous Polymerization: Will not occur. 10.4 Conditions to Avoid: Exposure or contact to extreme temperatures, incompatible chemicals, strong light sources, sparks, flame. Incompatible Substances: 10.5 Strong oxidizers, peroxides or strong acids. Heat, sparks, and flames. 11. TOXICOLOGICAL INFORMATION 11.1 Routes of Entry: Absorption: YES Ingestion: YES Toxicity Data: 11.2 This product has NOT been tested on animals to obtain toxicology data. Toxicology data, found in scientific literature, is available for some of the components of the product and is presented below. <u>n-Hexane</u>: LD_{50} (oral, rat) > 16,000 mg/kg; LD_{50} (dermal, rabbit) > 2,000 mg/kg; LC_{50} (inh 4h, rat) > 31.86 mg/L 11.3 Acute Toxicity: Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can cause drowsiness, dizziness, headaches and nausea. Chronic Toxicity: 11.4 This material may aggravate any pre-existing skin condition (e.g., dermatitis). 11.5 Suspected Carcinogen: WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.. This product contains Carbon Black, a IARC Group 2B: Possibley carcinogenic to humans. 11.6 Reproductive Toxicity: WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov. 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** n-Hexane: Readily Biodegradable (83%, 28 days) 12.2 Effects on Plants & Animals: There are no specific data available for this product. 12.3 Effects on Aquatic Life: n-Hexane: LC₅₀ (96h, Fathead minnow) 2.5 mg/L; EC₅₀ (48h, Daphna magna) 2.1 mg/L; EbL50 (72h, Green algae) 26 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 Waste Number: D001 (characteristic - ignitable) 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): UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L); or CONSUMER COMMODITY, ORM-D (IP VOL ≤ 1.0 L) - until 12/31/20 IATA (AIR)*: \bigcirc or \bigcirc \bigcirc UN1950, AEROSOLS, FLAMMABLE, 2.1 (LTD QTY, IP VOL ≤ 1.0 L); or CONSUMER COMMODITY, 9, ID8000 (IP VOL ≤ 0.5 L) 14.3 IMDG (OCN): UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L) 14.4 TDGR (Canadian GND): UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L) ADR/RID (EU): 14.5 UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L) SCT (MEXICO): UN1950, AEROSOLES, 2.1 (CANT. LTDA., IP VOL ≤ 1.0 L)

UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)



Page 5 of 6 **BC-033**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.1 SDS Revision Date: 11/29/2018

		15. REGULATORY II	NFORMATION					
15.1	SARA Reporting Requirements:	This product contains Hexane, a substance subje	ect to SARA Title III, Section 313 reporting requirements.					
15.2	SARA TPQ:	There are no specific Threshold Planning Quantities for the components of this product.						
15.3	TSCA Inventory Status:	The components of this product are listed on the	TSCA Inventory.					
15.4	CERCLA Reportable Quantity:	Hexane: 2,270 kg (5,000 lbs);						
15.5	Other Federal Requirements:	NA						
15.6	Other Canadian Regulations:	This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. WHMIS Class B3 (combustible liquids). WHMIS Class D2B (material causing other toxic effects).						
15.7	State Regulatory Information:	Substances List (MA), Minnesota Hazardous Su Permissible Exposures List (WA). Propane is found on the following state criteria list Isobutane is found on the following state criteria Isobutane in this product, present in state criteria Iists: California Proposition 65 (Substances List (FL), Massachusetts Hazardous Minnesota Hazardous Substances List (MN), No List (NY), Pennsylvania Right-to-Know List (PA)	ist: MA, NJ and PA.					
15.8	Other Requirements:	Substances List (WI). WARNING: This product can expose you to chemicals including n-Hexane and Carbon Black, which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov .						
		·						
		16. OTHER INFO	RMATION					
16.1	Other Information:	DANGER! HIGHLY FLAMMABLE LIQUID AIRWAYS. CAUSES SERIOUS EYE IRRITATION MAY CAUSE CANCER. Wash hands and exposion of eat drink or smoke when using this produprotection. IF IN EYES: Rinse cautiously with ward do. Continue rinsing. Immediately call a POISO specific first aid treatment (see section 4 of this syentilated area. Extinguish pilot light, cigarettes agone. KEEP LOCKED UP AND OUT OF REACHWARNING: This product can expose you	AND VAPOR. MAYBE FATAL IF SWALLOWED AND ENTERS ON. MAY BE HARMFUL IN CONTACT WITH SKIN OR IF INHALED. Seed skin areas thoroughly with soap and warm water after handling. Do uct. Avoid release to the environment. Wear protective gloves/eye are for several minutes. Remove contact lenses, if present and easy to N CENTER. IF ON SKIN: Wash with plenty of soap and water. For Safety Data Sheet). Rinse mouth. Store Locked up. Use only in well-and other possible sources of ignition prior to use and until vapors are					
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.						
16.3	Disclaimer:	This Safety Data Sheet is offered pursuant to O government regulations must be reviewed for a Casey, LLC knowledge, the information contains suitability or completeness is not guaranteed and The information contained herein relates only the safety of the contained herein relates only the contained herein relate	SHA's Hazard Communication Standard, 29 CFR §1910.1200. Other applicability to this product. To the best of ShipMate's & Birchwood and 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					
16.4	Prepared for:	Birchwood Casey, LLC 3260 Winpark Drive New Hope, MN 55427 USA Tel: +1 (952) 388-6717 Email: customerservice@birchwoodcasey.com http://www.birchwoodCasey.com	CASEY ®					
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					



Page 6 of 6 **BC-033**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.1 SDS Revision Date: 11/29/2018

DEFINITION OF TERMS

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

GENERAL INFORMATION:

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

EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists			
IDLH	Immediately Dangerous to Life and Health			
NOHSC	National Occupational Health and Safety Commission (Australia)			
OSHA	U.S. Occupational Safety and Health Administration			
PEL	PEL Permissible Exposure Limit			
STEL	TEL 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

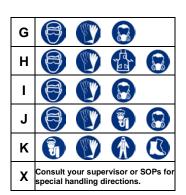
HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

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



PERSONAL PROTECTION RATINGS:

Α			
В			
С			
D	E STATE OF THE STA	THE STATE OF THE S	
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

FLAMMABILI	FLAMMABILITY LIMITS IN AIR:				
Autoignition	Minimum temperature required to initiate combustion in air with no other source				
Temperature	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	\
2	Moderate Hazard	REACTIVITY
3	Severe Hazard	
4	Extreme Hazard	
ACD	Acidic	
ALK	Alkaline	
COR	Corrosive	/ \ \ \ \ \
W	Use No Water	HEALTH
ОХ	Oxidizer	SPECIAL
TREFOIL	Radioactive	PRECAUTIONS

TOXICOLOGICAL INFORMATION:

LD ₅₀	Lethal Dose (solids & liquids) which kills 50% of the exposed animals			
LC ₅₀	Lethal concentration (gases) which kills 50% of the exposed animal			
ppm	Concentration expressed in parts of material per million parts			
TD _{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, TCo, LCio, & LCo				
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 _{ow} or log K _{oc}	Coefficient of Oil/Water Distribution			

REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System			
DOT	U.S. Department of Transportation			
TC	Transport Canada			
EPA	U.S. Environmental Protection Agency			
DSL	Canadian Domestic Substance List			
NDSL	Canadian Non-Domestic Substance List			
PSL	Canadian Priority Substances List			
TSCA	TSCA U.S. Toxic Substance Control Act			
EU	EU European Union (European Union Directive 67/548/EEC)			
WGK	Wassergefährdungsklassen (German Water Hazard Class)			

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

0	®		②	Θ	(%)		
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			\Diamond		*
GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environment