

SDS Revision: 2.1

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SDS Revision Date: 2/8/2016

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards **1. PRODUCT & COMPANY IDENTIFICATION**

1.1 Product Name: NICOLE BY OPI - MATTE TOP COAT 1.2 Chemical Name: Solvent Mixture 1.3 Synonyms: NA NI089 1.4 Trade Names: 1.5 Product Use: Professional or Sundry Use Only 1.6 Distributor's Name: **OPI** Products, Inc. 13034 Saticoy Street, No. Hollywood, CA 91605 USA Distributor's Address: 1.7 1.8 Emergency Phone: CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300 (CCN 16377) +1 (818) 759-2400 / +1 (818) 759-5776 1.9 Business Phone / Fax:

2. HAZARDS IDENTIFICATION

	2. TAZANDO IDENTITIOATION	
Hazard Identification:	This product is classified as a hazardous substance but not as dangerous goods according to the classification criteria of [NOHSC: 1088 (2004)] and ADG Code (Australia).	
	DANGER! HIGHLY FLAMMABLE LIQUID AND VAPOR. CAUSES SKIN IRRITATION.	
	CAUSES SERIOUS EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS.	
	Classification: Flam. Liq. 2; Skin Irrit. 2A; Eye Irrit. 2B; STOT SE 3	
	Hazard Statements (H): H225 - Highly Flammable liquid and vapor. H315 - Causes skin irritation.	
	H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.	
	Precautionary Statements (P): P210 - Keep away from heat/sparks/open flame/hot surfaces - No	
	Smoking. P233 – Keep container tightly closed. P243 – Take precautionary measures against	
	static discharge. P261 – Avoid breathing dust/fume/gas/mist/vapors/spray. P264 – Wash	
	exposed skin areas thoroughly with soap and water after handling. P272 – Contaminated work	
	clothing should not be allowed out of the workplace. P280 - Wear protective gloves/eye	
	protection/face protection. P302+P352 – IF ON SKIN: Wash with soap and water.	
	P305+P351+P338 – IF IN EYES: Rinse continuously with water for several minutes. Remove	•
	contact lenses if present and easy to do – continue rinsing. P333+P313 – If skin irritation or a rash	
	occurs – Get medical advice/attention. P363 – Wash contaminated clothing before reuse.	•
	P370+P378 – In case of fire, CO ₂ , Halon (if permitted), dry chemical, or foam for extinction.	
	P403+P235 – Store in a well-ventilated place. Keep cool. P501 – Dispose of contents/container	
	to a licensed treatment, storage or disposal facility (TSDF).	

3. COMPOSITION & INGREDIENT INFORMATION

					EXPOSURE LIMITS IN AIR (mg/m ³)								
					AC	GIH		NOHSC	;		OSHA		
					р	ppm		ppm		ppm			
CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	TLV	STEL	ES- TWA	ES- STEL	ES- PEAK	PEL	STEL	IDLH	OTHER
ETHYL ACETATE	141-78-6	AH5425000	205-500-4	40-70	400	400	200	400	NF	NA	NA	2000	400 TWA
	Flam. Liq. 2;	Eye Irrit. 2; STOT	SE 3; H225, H31	9, H336									
BUTYL ACETATE	123-86-4	AF7350000	204-658-1	10-30	150	200	150	200	NF	200	200	1700	100 NIOSH
SOTTE AGETATE		STOT SE 3; H226											
ISOPROPYL ALCOHOL	67-63-0	NT8050000	200-661-7	10-30	400	500	400	500	NF	400	500	2000	400 TWA
		Eye Irrit. 2; STOT					1						
NITROCELLULOSE	9004-70-0	QW0970000	NA	7-13	400	400	400	200	NF	NA	NA	2000	400 TWA
	Flam. Liq. 2;			1					r				
ADIPIC ACID / NEOPENTYL	28407-73-0	NA	NA	3-7	NA	NA	NF	NF	NF	NA	NA	NA	
GLYCOL / TRIMENLLITIC ANHYDRIDE COPOLYMER	Skin Sens. 1;												-
HYDRATED SILICA	1343-98-2	VV8853000	215-683-2	1-5	NA	NA	NF	NF	NF	NA	NA	NA	
				-	-								
TRIMETHYL PENTANYL	6846-50-0	AF7350000	229-934-9	1-5	150	200	150	200	NF	200	200	1700	150 TWA
DIISOBUTYRATE	Aquatic Chro	nic 4; Skin Irrit.2; I	Eye Irrit. 2; STOT	`RE_2; H₄	113, H3	15, H31	9, H373	3					
		4.	FIRST All	D ME	ASU	RES							
4.1 First Aid:	Ingestion: Eyes:	IMMEDIATELY unconscious p estimate of th swallowed.	 If the patien erson. Contac e time at which 	t is vomi t the nea ch the m	ting, co rest Po naterial	ontinue bison (was i	e to off Control ingeste	er wat Cente ed and	er or r r or lo I the a	nilk. N cal en amour	Never (nergen nt of th	give wa cy nun ne sub	of water or mill ater or milk to an ber. Provide an stance that was unts of lukewarn
	<u>Skin</u> :	water for at lea If irritation occu	st 15 minutes. urs and produc	If irritation the second se	on occi e skin,	urs, co rinse t	ntact a	physio hly wi	cian. th luke	warm	water,	follow	ed by a thoroug
		physician imm		a with so	ap and	a wale	1. 11 11	ΠαιίΟΙ	i, ieui	1622 (i Swei	ing pe	



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		4. FIRST AID MEASURES – cont'd
4.2	Effects of Exposure:	Ingestion:If product is swallowed, may cause nausea, vomiting and/or diarrhea and central nervous system depression.Eves:Irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation and watering.Skin:May be irritating to skin in some sensitive individuals, especially after prolonged and/or repeated contact.Inhalation:Vapors of this product may be slightly irritating to the nose, throat and other tissues of the respiratory system. Symptoms of overexposure can include coughing, wheezing, nasal congestion, and difficulty breathing. Inhalation of vapors exceeding the levels listed in Section 3 (Composition and Ingredient Information) can cause central nervous system depression (e.g., drowsiness, dizziness, headaches, nausea).Symptoms of skin overexposure in individuals may include redness, itching, and irritation of affected areas.
		Overexposure in eyes may cause redness, itching and watering. Mild to moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can cause
4.4	Acute Health Effects:	drowsiness, dizziness, headaches and nausea.
4.5	Chronic Health Effects:	None known.
4.6	Target Organs: Medical Conditions Aggravated by Exposure:	Eyes, Skin, Respiratory System. Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin, and respiratory system). HEALTH 1 FLAMMABILITY 3 PHYSICAL HAZARDS 0 PROTECTIVE EQUIPMENT B EYES SKIN
		5. FIREFIGHTING MEASURES
5.1	Fire & Explosion Hazards:	WARNING: EXTREMELY FLAMMABLE! Keep away from heat, lit cigarettes, sparks & open flame. Keep container closed.
5.2	Extinguishing Methods:	CO ₂ , Halon (if permitted), Dry Chemical or Foam, as authorized.
5.3	Firefighting Procedures:	This product is a Class IB flammable liquid. When involved in a fire, this product will ignite readily and decompose to produce carbon oxides. Vapors of this product are heavier than air and may travel to a source of ignition and flash back to a leaking or open container. First responders should wear eye protection. Structural firefighters must wear SCBAs and full protective equipment. Use a water spray or fog to reduce or direct vapors. Water may not be effective in actually extinguishing a fire involving this product. HazChem Code: 3(Y)E
		6. ACCIDENTAL RELEASE MEASURES
6.1	Spills:	Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment. For <u>small spills</u> (e.g., < 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves) Maximize ventilation (open doors and windows) and secure all sources of ignition. Remove spilled material with absorbent material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse. For <u>large spills</u> (e.g., ≥ 1 gallon (3.8 L)), deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g., sand or earth). Use ONLY non-sparking tools for recovery and cleanup. Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for proper disposal. Remove contaminated clothing areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.
	1	7. HANDLING & STORAGE INFORMATION
7.1	Work & Hygiene Practices: Storage & Handling:	 Avoid prolonged contact with the product. Avoid breathing vapors of this product. Use in a well-ventilated location (e.g., local exhaust ventilation, fans). After use, wash hands and exposed skin with soap and water. Do not eat, drink or smoke while handling product. Keep this material away from heat, sparks and open flame. Open containers slowly on a stable surface. Keep container closed tightly when not in use. Empty container may contain residual amounts of this product; therefore.
		Toolitainer elesea agray when not in ase. Empty container may contain residual amounts of and product, areferere.
7.3	Special Precautions:	empty containers should be handled with care. Store containers in a cool, dry location, away from direct sunlight, other light sources, or sources of intense heat. Store away from incompatible materials (See Section 10). Open containers slowly on a stable surface. Keep container tightly closed when not in use. Empty containers may



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		8. EXPOSURE CON	TRO	58	PFRS		PRO	TEC			
8.1.	Exposure Limits:	J. LA COURE CON		GIH		NOHSC			OSHA		OTHER
0.1.	ppm (mg/m ³)				ES-	ES-	ES-			1	OTHER
		CHEMICAL NAME(S)	TLV	STEL	TWA	STEL	PEAK	PEL	STEL	IDLH	
		ETHYL ACETATE	400	400	200	400	NF	NA	NA	2000	400 TWA
		BUTYL ACETATE	150	200	150	200	NF	200	200	1700	100 NIOSH
		NITROCELLULOSE	400	400	400	200	NF	NA	NA	2000	400 TWA
		TRIMETHYL PENTANYL DIISOBUTYRATE	150	200	150	200	NF	200	200	1700	150 TWA
8.2	Ventilation & Engineering Controls:	When working with large qua Ensure that an eyewash station									ust ventilation, fans
8.3	Respiratory Protection:	No special respiratory protection necessary, use only respirator §1910.134, or applicable U.S. provinces, E.C. member states,	y prote state	ction au regulati	ithorized	per U.S.	OSHA's	require	ment in	29 CFR	
8.4	Eye Protection:	Wear protective eyewear (e.g. product. Always use protectiv special hazard; soft lenses may	, safety e eyew	[,] glasse ear whe	en cleani	ng spills					
8.5	Hand Protection:	AVOID SKIN CONTACT DUE repeated skin contact will occu industrial use. If necessary, re Canada, of the E.C. member st	TO SE r during fer to U	USE of	ING PO this prod	TENTIAL	latex or	rubber g	gloves fo	or routine	
8.6	Body Protection:	AVOID SKIN CONTACT DU protection is required under ty appropriate standards of Canad	E TO : pical ci	ircumsta	ances of	use and	handling	. If ne			
	Γ.	9. PHYSICAI				PROF	PERTIE	ES			
9.1	Appearance:	Clear, slightly opaque viscous g	jel liquio	t l							
9.2	Odor:	Characteristic odor									
9.3	Odor Threshold:	ND									
9.4	pH:	NA									
9.5	Melting Point/Freezing Point:	NA									
9.6	Initial Boiling Point/Boiling Range:	78 °C (173 °F)									
9.7	Flashpoint:	- 1 °C (30 °F) estimated									
9.8	Upper/Lower Flammability Limits:	Upper 19.0 / Lower 1.7									
9.9	Vapor Pressure:	ND									
9.10	Vapor Density:	NA									
9.11	Relative Density:	0.9700 - 1.100									
9.12	Solubility:	Partially soluble									
9.13	Partition Coefficient (log Pow):	NA									
9.14	Autoignition Temperature:	NA									
9.15	Decomposition Temperature:	NA									
9.16	Viscosity:	1,000 – 3,000 cPs									
	,		- 10								
9.17	Other Information:	Evaporation Rate: < 1.0 (n-BuA	.c = 1.0)								
		10. ST									
10.1	Stability:	Stable under ambient condition									
10.2	Hazardous Decomposition Products:	If exposed to extremely high t carbon oxide gases (e.g., CO, C		tures, tl	he produ	cts of the	ermal dec	composi	tion mag	y include	e irritating vapors ar
10.3	Hazardous Polymerization:	May occur, if exposed to extren		h tempe	ratures.						
10.4	Conditions to Avoid:	Exposure or contact to extreme	, 0			tible chen	nicals. stro	ona liah	t source	s, sparks	, flame.
10.5	Incompatible Substances:	This product is incompatible v muriatic acids), or strong bases	vith stro	ong oxid	lizers (e.	g., perox					
		11. TOXIC	010	GICA		ORM					
11.1	Routes of Entry:	Inhalation: YES					/ES			Ingest	ion: YES
11.2	Toxicity Data:	This product has NOT been tes available for some of the compo Ethyl Acetate: LD_{50} (oral, rat) =	onents o	of the pr	to obtain oduct an	toxicolog d is prese	gy data.	w:		, found in	scientific literature,
11.3	Acute Toxicity:	See Section 4.4		0.0/						. /	• • •
11.4	Chronic Toxicity:	See Section 4.5									
11.5	Suspected Carcinogen:	This product contains Ethyl Ace carcinogens by the IARC.	etate an	d <u>Isopro</u>	pyl Alcol	<u>nol</u> , which	is not ca	rcinoge	nic to hu	umans, b	ut is listed as Group



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11. TOXICOLOGICAL INFORMATION – cont'd

		T1. TOXICOLOGICAL INFORMATION – cont d
11.6	Reproductive Toxicity:	No
	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 4.3
11.8	Biological Exposure Indices:	NE
11.9	Physician Recommendations:	Treat symptomatically.
		12. ECOLOGICAL INFORMATION
12.1	Environmental Stability:	The components of this product will slowly degrade over time into a variety of organic compounds. Specific
		environmental data available for the components of this product are as follows: <u>Ethyl Acetate</u> : $K_{oc} = 0.73$. Water solubility: 64,000 mg/l. Bioconcentration Factor = 4-14. Bioconcentration is not anticipated to be significant. This compound can be removed from contaminated environments from volatilization, and biodegradation. This compound's half-life in water is 6.1 hours. <u>Butyl Acetate</u> : $K_{oc} = 1.82$. Water solubility: 120 parts H ₂ O at 25°C (77°F). Bioconcentration Factor = 4-14 Bioconcentration is not anticipated to be significant. This compound can be removed from contaminated environments from volatilization, and biodegradation. This compound's half-life in water is 6.1 hours. <u>Butyl Acetate</u> : $K_{oc} = 1.82$. Water solubility: 120 parts H ₂ O at 25°C (77°F). Bioconcentration Factor = 4-14 Bioconcentration is not anticipated to be significant. This compound can be removed from contaminated environments from volatilization, and biodegradation. This compound's half-life in water is 6.1 hours. <u>Isopropyl Alcohol</u> : Log K _{OW} = 0.05-0.14. Isopropyl alcohol occurs naturally; it is generated during microbial degradation of plant and animal wastes. When released on land or water, it is apt to volatilize and biodegrade. The estimated half life in water is 5.4 days. Isopropyl alcohol is not expected to bioconcentrate.
12.2	Effects on Plants & Animals:	There are no specific data available for this product.
12.2	Effects on Aquatic Life:	There are no specific data available for this product; however, very large releases of this product may be harmful or fata
12.5	Lifects on Aquatic Life.	to overexposed aquatic life.
	•	
10.1	Weste Dispass!	13. DISPOSAL CONSIDERATIONS
13.1	Waste Disposal:	Waste disposal must be in accordance with appropriate Federal, state, and local regulations.
13.2	Special Considerations:	U.S. EPA Waste Number: D001 (characteristic - ignitable)
		proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information/ICAO, IMDG and the CTDGR. UN1263, PAINT, 3, II, LTD QTY (IP VOL ≤ 1.0 L) or
14.2	IATA (AIR):	CONSUMER COMMODITY, ORM-D – until 01/01/2021 ID8000, CONSUMER COMMODITY, 9 (IP VOL ≤ 0.5 L)
14.3	IMDG (OCN):	UN1263, PAINT, 3, II (IP VOL ≤ 1.0 L)
	, <i>,</i>	
14.4	TDGR (Canadian GND):	UN1263, PAINT, 3, II, LTD QTY (IP VOL ≤ 1.0 L); or "LIMITED QUANTITY" or "QUANTITÉ LIMITÉE" or "LTD QTY" or "QUANT LTÉE" (≤ 1.0 L)
14.5	ADR/RID (EU):	UN1263, PAINT, 3, II, LTD QTY (IP VOL ≤ 1.0 L)
14.6	SCT (MEXICO):	UN1263, PINTURA, 3, II, CANTIDAD LIMITADA (IP VOL ≤ 1.0 L)
14.7	ADGR (AUS):	UN1263, PAINT, 3, II, LTD QTY (IP VOL ≤ 1.0 L)
* Thi	s product may also be shippe	d as an Excepted Quantity (Inner Package Volume ≤ 30 mL, Total Quantity ≤ 500 mL per Outer Package)
		15. REGULATORY INFORMATION
15.1	SARA Reporting Requirements:	This product contains <u>Isopropanol</u> , a substance subject to SARA Title III, Section 313 reporting requirements. The product contains <u>Ethyl Acetate</u> , a substance that is subject to SARA Title III, Section 304 reporting.
15.2	SARA Threshold Planning Quantity:	There are no specific Threshold Planning Quantities for the components of this product.
15.3	TSCA Inventory Status:	The components of this product are listed on the TSCA Inventory.
15.4	CERCLA Reportable Quantity (RQ):	Ethyl Acetate: 2,270 kg (5,000 lbs); Butyl Acetate: 2,270 kg (5,000 lbs)
	Other Federal Requirements:	This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR subchapter ((Cosmetics).
15.5		This product has been classified according to the hazard criteria of the CPR and the Safety Data

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SAFETY DATA SHEET

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		15. REGULATORY INFORMATION – cont'd
15.7	State Regulatory Information:	Butyl Acetateis found on the following state criteria lists: California OSHA Hazardous Substances List (CA), DelawareAir Quality Management List (DE), Massachusetts Hazardous Substances List (MA), New Jersey Right-to-Know List(NJ), New York List of Hazardous Substances (NY), Pennsylvania Right-to-Know List (PA), and Washington PermissibleExposures List for Air Contaminants (WA), Wisconsin Hazardous Substances List (WI).Ethyl AcetateIs found on the following state criteria lists: CA, DE, MA, MN, NJ, NY, PA, WA.IsopropanolIs found on the following state criteria lists: DE, MA, PA.No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following statecriteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic SubstancesList (FL), Massachusetts Hazardous Substances List (MA), New York Hazardous Substances List (NY),Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (NY),Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances
15.8	Other Requirements:	The primary components of this product are listed in Annex I of EU Directive 67/548/EEC: <u>Ethyl Acetate</u> : Flammable (F). <u>Risk Phrases</u> (R): 11-36/37/38 – Highly flammable. Irritating to eyes, respiratory system and skin. <u>Safety Phrases</u> (S): 2-16-23-29-33 – Keep out of the reach of children. Keep away from sources of ignition - No smoking. Do not breathe gas, fumes, vapor or spray. Do not empty into drains. Take precautionary measures against static discharges. <u>Butyl Acetate</u> : Flammable (F). <u>Risk Phrases</u> (R): Flammable. <u>Safety Phrases</u> (S): 9-16-33 - Keep container in a well-ventilated place. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. <u>Isopropanol</u> : Flammable (F). <u>Risk Phrases</u> (R): 11-36/37 – Highly flammable. Irritating to eyes and respiratory system. <u>Safety Phrases</u> (S): 2-7-16-24/25/26 – Keep out of the reach of children. Keep container tightly closed. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
16.1	Other Information:	16. OTHER INFORMATION DANGER! HIGHLY FLAMMABLE LIQUID AND VAPOR. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS Keep away from heat/sparks/open flames/ hot surfaces – No Smoking - Avoid breathing vapor/spray. Wear eye/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Store in a well-ventilated place. Keep cool. KEEP OUT OF REACH OF CHILDREN.
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.
16.3	Disclaimer:	This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & OPI's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.
16.4	Prepared for:	OPI Products, Inc. 13034 Saticoy Street No. Hollywood, CA 91605 USA Tel: +1 (818) 759-2400 Fax: +1 (818) 759-5776 http://www.opi.com
16.5	Prepared by:	ShipMate, Inc. P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 http://www.shipmate.com



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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

EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists
TLV	Threshold Limit Value
OSHA	U.S. Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
IDLH	Immediately Dangerous to Life and Health

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	HEALTH
1	Slight Hazard	FLAMMABILITY
2	Moderate Hazard	PHYSICAL HAZARDS
3	Severe Hazard	PERSONAL PROTECTION
4	Extreme Hazard	

PERSONAL PROTECTION RATINGS:

Α	6		G		
в	6		н		
С		E .	I		
D	ß	E.	J		
Е	0		κ		
F			X		r supervisor or SOPs andling directions.
Sa	fety Glasses	Splash Goggles		Shield & ive Eyewear	Gloves
	Boots	Synthetic Apron		tive Clothing Full Suit	Dust Respirator
Full F	Face Respirator	Dust & Vapor Half- Mask Respirator		ull Face spirator	Airline Hood/Mask or SCBA
отн	ER STANDARI	ABBREVIATIONS	:		

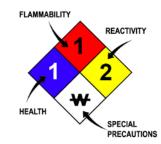
NA	Not Available
NR	No Results
NE	Not Established
ND	Not Determined
ML	Maximum Limit
SCBA	Self-Contained Breathing Apparatus

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILI	FLAMMABILITY LIMITS IN AIR:				
Autoignition	Minimum temperature required to initiate combustion in air with no other				
Temperature	source of ignition				
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will				
	explode or ignite in the presence of an ignition source				
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will				
	explode or ignite in the presence of an ignition source				

HAZARD RATINGS:

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



TOXICOLOGICAL INFORMATION:

LD ₅₀	Lethal Dose (solids & liquids) which kills 50% of the exposed animals
	S
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 _{lo} , LD _{lo} , & 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
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:

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Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compresse d	Flammabl e	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

EC (67/548/EEC) INFORMATION:

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С	E	F	Ν	0	т	Xi	Xn
Corrosive	Explosive	Flammabl e	Harmful	Oxidizing	Toxic	Irritant	Harmful

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

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