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Page 1 of 7 SDS-006

SAFETY DATA SHEET Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision: 2.2 SDS Revision Date: 2/8/2016 1. PRODUCT & COMPANY IDENTIFICATION Product Name: **ACRYLIC NAIL BASE COAT** Chemical Name Solvent Mixture Synonyms: NA Trade Names: NTT20, NTT24 Product Use: Professional or Sundry Use Only Distributor's Name **OPI Products**, Inc. Distributor's Address: 13034 Saticoy Street, No. Hollywood, CA 91605 USA Emergency Phone: CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300 (CCN XXXXX) Business Phone / Fax: +1 (818) 759-2400 / +1 (818) 759-5776 2. HAZARDS IDENTIFICATION Hazard Identification: This product is classified as a hazardous substance and as dangerous goods according to the classification criteria of NOHSC: 1008 (2004) and ADG Code (Australia). DANGER! HIGHLY FLAMMABLE LIQUID AND VAPOR. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS. Classification: Flam. Liq. 2, Skin Sens. 1, Eye Irrit. 2A, STOT SE3 Hazard Statements (H): H225 - Highly flammable liquid and vapor. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H320 - Causes 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 fume/ 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. P281 Use personal protective equipment as required. P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. 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. P321 – For specific first aid treatment (See Section 4 of this Safety Data Sheet). P363 - Wash contaminated clothing before reuse. P370+P378 - In case of fire, CO₂, 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 First Aid: Ingestion: swallowed. Eyes:



								EXPO	SURE L	MITS IN	AIR (m	g/m³)	
					AC	GIH		NOHSC			OSHA		
					p	ppm		ppm		рр			
CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	TLV	STEL	ES- TWA	ES- STEL	ES- PEAK	PEL	STEL	IDLH	OTHER
	123-86-4	AF7350000	204-658-1	15-40	150	200	150	200	NF	200	200	1700	100 NIOSH
BUTYL ACETATE	Flam. Liq. 3; S	TOT SE 3; H226,	H336										
	108-88-3	XS52500000	203-625-9	15-40	50	300	100	150	574	200	300	500	SKIN
TOLUENE	Flam. Liq. 2; Repr. 2; Asp. Tox. 1; STOT RE 2 *; Skin Irrit. 2; STOT SE 3; H225, H361d ***, H304, H373 **, H315, H336												
	141-78-6	AH5425000	205-500-4	10-30	400	400	200	400	NF	NA	NA	2000	400 TWA
ETHYL ACETATE	Flam. Liq. 2; E	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336											
	67-63-0	NT8050000	200-661-7	7-13	400	500	400	500	NF	400	500	2000	400 TWA
SOPROPYL ALCOHOL	Flam. Liq. 2; E	Flam. Lig. 2: Eye Irrit. 2: STOT SE 3: H225, H319, H336											
FOSYLAMIDE/	25035-71-6	QW0970000	NA	7-13	NA	NA	NF	NF	NF	NA	NA	NA	
FORMALDEHYDE RESIN													

41 If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give water or milk to an unconscious person. Contact the nearest Poison Control Center or local emergency number. Provide an estimate of the time at which the material was ingested and the amount of the substance that was Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. If irritation occurs, contact a physician. If irritation occurs and product is on the skin, rinse thoroughly with lukewarm water, followed by a thorough Skin: washing of the effected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately. Inhalation: Remove victim to fresh air at once.



Page 2 of 7 **SDS-006**

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

SDS Revision: 2.2 SDS Rev

		4. FIRST AID MEASURES – cont'	d						
4.2	Effects of Exposure:	Ingestion: If product is swallowed, may cause nausea, vomitir depression.	ng and/or diarrhea and central nervous	s system					
		Eyes: Irritating to the eyes. Symptoms of overexposure may in		0					
			<u>Skin</u> : 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							
		Information) can cause central nervous system depression (e.g., drowsiness, dizziness, headaches, nausea).							
4.3	Symptoms of Overexposure:	Symptoms of skin overexposure in individuals may include red Overexposure in eyes may cause redness, itching and watering.							
4.4	Acute Health Effects:	Mild to moderate irritation to eyes and skin near affected areas. Add drowsiness, dizziness, headaches and nausea.	litionally, high concentrations of vapors ca	an cause					
4.5	Chronic Health Effects:	None known.							
4.6	Target Organs:	Eyes, Skin, Respiratory System.							
4.7	Medical Conditions Aggravated by Exposure:	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	В					
			EYES SKIN						
		5. FIREFIGHTING MEASURES							
5.1	Fire & Explosion Hazards:	DANGER! HIGHLY FLAMMABLE LIQUID AND VAPOR! Keep av	way from heat, lit cigarettes,						
		sparks & open flame. Keep container closed.	-						
5.2 5.3	Extinguishing Methods:	CO ₂ , Halon (if permitted), Dry Chemical, Foam, as authorized.	the second sector (11) have the second the						
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 contai							
		First responders should wear eye protection. Structural firefighters		$\mathbf{\mathbf{Y}}$					
		protective equipment. Use a water spray or fog to reduce or direct effective in actually extinguishing a fire involving this product.	vapors. Water may not be						
		HazChem Code: 3(Y)E							
		Hazard Identification Number: 33							
		6. ACCIDENTAL RELEASE MEASU	PES						
6.1	Spills:	Before cleaning any spill or leak, individuals involved in spill clea		Protective					
		Equipment.		101001110					
		For small spills (e.g., < 1 gallon (3.8 L)) wear appropriate persor							
		Maximize ventilation (open doors and windows) and secure all so absorbent material and place into appropriate closed container(s) for							
		local, state and federal regulations. Wash all affected areas and out	utside of container with plenty of warm w						
		soap. Remove any contaminated clothing and wash thoroughly before							
		For <u>large spills</u> (e.g., ≥ 1 gallon (3.8 L)), deny entry to all unprotect material (e.g., sand or earth). Use ONLY non-sparking tools for recov							
		recovery or disposal and solid diking material to separate contain							
		clothing promptly and wash affected skin areas with soap and water.	Keep spills and cleaning runoffs out of r	nunicipal					
		sewers and open bodies of water.							
		7. HANDLING & STORAGE INFORMA	TION						
7.1	Work & Hygiene Practices:	Avoid prolonged contact with the product. Avoid breathing vapors of the							
		local exhaust ventilation, fans). After use, wash hands and exposed smoke while handling product.	•						
7.2	Storage & Handling:	Keep this material away from heat, sparks and open flame. Ope container closed tightly when not in use. Empty container may con	en containers slowly on a stable surface	e. Keep					
		empty container should be handled with care. Store container in a		,					
		light sources, or sources of intense heat. Store away from incompatib		, .,					
7.3	Special Precautions:	Open containers slowly on a stable surface. Keep container tightly		ners may					
		contain residual amounts of this product; therefore, empty containers s	snould be handled with care.						
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Page 3 of 7 **SDS-006**

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

SDS Revision: 2.2

8.1	Exposure Limits:		AC	GIH		NOHSC			OSHA		OTHER
	ppm (mg/m ³)		T 1.1/	OTEL	ES-	ES-	ES-	551	OTEL		
		CHEMICAL NAME(S) BUTYL ACETATE	TLV 150	STEL 200	TWA 150	STEL 200	PEAK NF	200	STEL 200	1700	100 NIOSH
		TOLUENE	50	300	100	150	574	200	300	500	SKIN
		ETHYL ACETATE	400	400	200	400	NF	NA	NA	2000	400 TWA
		ISOPROPYL ALCOHOL	400	500	400	500	NF	400	500	2000	400 TWA
8.2	Ventilation & Engineering	When working with large qua									
	Controls:	Ensure that an eyewash station									
3.3	Respiratory Protection:	instances where vapors or spra needed, use only protection aut	o special respiratory protection is required under typical circumstances of use or handling. In stances where vapors or sprays of this product are generated, and respiratory protection is eeded, use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or e Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC ember States, or Australia.								
3.4	Eye Protection:	product. Always use protective	Wear protective eyewear (e.g., safety glasses with side-shield) at all times when handling this product. Always use protective eyewear when cleaning spills or leaks. Contact lenses pose a special hazard; soft lenses may absorb and concentrate irritants.							(
3.5	Hand Protection:							ipated t	hat pro	lonaed	&
		AVOID SKIN CONTACT DUE TO SENSITIZING POTENTIAL. If anticipated that prolonged & repeated skin contact will occur during use of this product, wear latex or rubber gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the E.C. member states.						of			
3.6	Body Protection:	AVOID SKIN CONTACT DU protection is required under ty appropriate standards of Canad	pical ci	rcumsta	nces of	use and	handling				
		9. PHYSICA	L & C	HEM		PRO	PERTI	ES			
9.1	Appearance:	Viscous liquid									
9.2	Odor:	Ester (fruity) odor									
9.3	Odor Threshold:	ND									
9.4	pH:	NA									
9.5	Melting Point/Freezing Point:	NA									
9.6	Initial Boiling Point/Boiling Range:	171 – 640 °F									
9.7	Flashpoint:	- 1 °C (30 °F) estimated									
9.8	Upper/Lower Flammability Limits:	NA									
9.9	Vapor Pressure:	NA									
9.10	Vapor Density:	NA									
9.11	Relative Density:	NA									
9.12	Solubility:	Insoluble									
9.13	Partition Coefficient (log Pow):	NA									
9.14	Autoignition Temperature:	NA									
9.15	Decomposition Temperature:	NA									
9.16		> 1,200 cPs									
9.17	Other Information:	NA									
5.11	othor monitation.	NA									
		10. ST									
10.1	Stability:	Stable under ambient condition									
10.2	Hazardous Decomposition Products:	If exposed to extremely high to carbon oxide gases (e.g., CO,		tures, th	e produ	cts of th	ermal dec	composi	tion ma	iy includ	de irritating vapors ar
10.3	Hazardous Polymerization:	May occur, if exposed to extrer		n tempe	atures.						
10.4	Conditions to Avoid:	High temperatures, direct sunlig				incompat	ible mate	rials.			
10.5	Incompatible Substances:	This product is incompatible v muriatic acids), nitrates, or stron	vith stro	ng oxidi	zers, (e.	g., perox	kides, sup		s), stro	ng acid	s (e.g., hydrochloric o



Page 4 of 7 **SDS-006**

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

SDS Revision: 2.2 SD

11.1	Routes of Entry:	Inhalation: YES Absorption: YES Ingestion: YES
11.2	Toxicity Data:	This product has NOT been tested on animals to obtain toxicology data. Toxicology data, found in scientific literature,
		available for some of the components of the product and is presented below:
		Ethyl Acetate: LD ₅₀ (oral, rat) = 5,620 mg/kg; LD ₅₀ (oral, mouse) = 4,100 mg/kg; LC ₅₀ (inh-6h, rat) = 16,000 ppm
11.3	Acute Toxicity:	<u>Toluene</u> : LD_{50} (oral, rat) = 636 mg/kg; LD_{50} (oral, mouse) = 400 mg/kg; LC_{50} (inh-6h, rat) = 49 gm/m ³ /4H
11.3	Chronic Toxicity:	See Section 4.4
11.4	Suspected Carcinogen:	See Section 4.5 This product contains Ethyl Acetate, Toluene and Isopropyl Alcohol, which are not carcinogenic to humans, but ar
11.0	ouppoid ouromogen.	listed as Group 3 carcinogens by the IARC.
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 4.3
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. Specifi
		environmental data available for the components of this product are as follows:
		Ethyl Acetate: Koc = 0.73. Water solubility: 64,000 mg/l. Bioconcentration Factor = 4-14. Bioconcentration is no
		anticipated to be significant. This compound can be removed from contaminated environments from volatilization, ar
		biodegradation. This compound's half-life in water is 6.1 hours.
		Isopropyl Alcohol: Log K _{ow} = 0.05-0.14. Isopropyl alcohol occurs naturally; it is generated during microbial degradatic of plant and animal wastes. When released on land or water, it is apt to volatilize and biodegrade. The estimated hal
		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.
12.3	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
		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)
		14. TRANSPORTATION INFORMATION
The	havia departintion (ID Num	nber, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additiona
		e required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.
14.1	49 CFR (GND):	UN1263, PAINT, 3, II, LTD QTY (IP VOL ≤ 1.0 L) or
		CONSUMER COMMODITY, ORM-D – until 01/01/2021
14.2	IATA (AIR):	UN1263, PAINT, 3, II
		ID8000, CONSUMER COMMODITY, 9 (IP VOL ≤ 0.5 L)
14.3	IMDG (OCN):	
		UN1263, PAINT, 3, II, LTD QTY (IP VOL ≤ 1.0 L)
14.4	TDGR (Canadian GND):	
14.4	TDOR (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):	LIMITED QUANTITY OF QUANTITE LIMITEE OF LID QIT OF QUANTILIEE (\$ 1.0 L)
	ADR/RID (EU):	UN1263, PAINT, 3, II, LTD QTY (IP VOL ≤ 1.0 L)
14.5	SCT (MEXICO):	
		UN1263, PINTURA, 3, II, CANTIDAD LIMITADA (IP VOL ≤ 1.0 L)
14.5		
	ADGR (AUS):	UN1263, PAINT, 3, II, LTD QTY (IP VOL ≤ 1.0 L) *



Page 5 of 7 **SDS-006**

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

SDS Revision: 2.2 SDS

<u> </u>		15. REGULATORY INFORMATION					
15.1	SARA Reporting Requirements:	This product contains <u>Toluene</u> and <u>Isopropanol</u> , substances subject to SARA Title III, Section 313 reporting requirements. This 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):	<u>Toluene</u> : 454 kg (1,000 lbs); <u>Ethyl Acetate</u> : 2,270 kg (5,000 lbs).					
15.5	Other Federal Requirements:	This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR subchapter G (Cosmetics). <u>Toluene</u> is listed as a hazardous air pollutant (HAP). This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors. <u>Toluene</u> is listed as a Hazardous Substance under the CWA. <u>Toluene</u> is listed as a Priority Pollutant under the Clean water Act. <u>Toluene</u> is listed as a Toxic Pollutant under the Clean Water Act.					
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 B2, D2B (Flammable, Other Toxic Effects)					
15.7	State Regulatory Information:						
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>Toluene:</u> Flammable, Harmful (F, Xn). <u>Risk Phrases</u> (R): 11-48/20-65-38 – Highly Flammable. Harmful: Danger of serious damage to health by prolonged exposure through inhalation. Harmful may cause lung damage if swallowed. Irritation to skin. <u>Safety Phrases</u> (S) 2-36/37-46-62 – Keep out of reach of children. Wear suitable protective clothing and gloves. If swallowed, seek medical advice immediately and show container or label. If swallowed do not induce vomiting; seek medical advice immediately and show this container or label. <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.					



Page 6 of 7 **SDS-006**

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

SDS Revision: 2.2

		16. OTHER INFORMATION					
16.1	Other Information:	DANGER! HIGHLY FLAMMABLE LIQUID AND VAPOR. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS. Keep away from heat/sparks/open flame/hot surfaces – No Smoking. Keep container tightly closed. Take precautionary measures against static discharge. Avoid breathing fume/ mist/vapors/spray. Wash exposed skin areas thoroughly with soap and water after handling. Wear protective gloves/eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with soap and water. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If skin irritation or a rash occurs – Get medical advice/attention. Store in a well-ventilated place. Keep cool. KEEP OUT OF REACH OF CHILDREN. WARNING: This product contains <u>Toluene</u> , a chemical known to the state of California to cause 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. 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					



Page 7 of 7 SDS-006

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

SDS Revision: 2.2

SDS Revision Date: 2/8/2016

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					G				2	
В					н			Ţ	は、当	
С			E.		I				2	
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Е			\bigcirc		κ	() ()			Ŕ	
F					x	Consult for spec	your su ial hand	ipervis Iling d	sor or lirectio	SOPs ons.
Sa	ifety Glas	ses	Splash Goggles	F		Shield &			Glove	s
	Boots		Synthetic Apron	I		tive Cloth	ing	Dust	Resp	irator
								Ŵ		

Dust & Vapor Half- Full Face Airline Hood/Mask Mask Respirator Respirator or SCBA

OTHER STANDARD ABBREVIATIONS:

Full Face Respirator

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

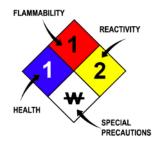
NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:

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

HAZARD RATINGS:

0	Minimal Hazard					
1	Slight Hazard					
2	Moderate Hazard					
3	Severe Hazard					
4	Extreme Hazard					
ACD	Acidic					
ALK	Alkaline					
COR	Corrosive					
₩	Use No Water					
OX	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 _{lo}	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 _{io} , & 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				
	Coefficient of Oil/Water Distribution				

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				
тс	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
Compressed	Flammable	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	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful

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

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