



1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	P+ COLOR COAT
1.2	Chemical Name:	Polyurethane Acrylate Prepolymer Resin Blend
1.3	Synonyms:	NA
1.4	Trade Names:	P+ Color Coat
1.5	Product Use:	Professional or Sundry Use Only
1.6	Distributor's Name:	McConnell Labs, Inc.
1.7	Distributor's Address:	406 S.W. Umatilla Ave., Redmond, OR 97756 USA
1.8	Emergency Phone:	CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300 (CCN XXXXX)
1.9	Business Phone / Fax:	+1 (541) 526-1417 / +1 (541) 526-1418

2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	<p>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). WARNING! FLAMMABLE LIQUID AND VAPOR. MAY CAUSE AN ALLERGIC SKIN REACTION. AVOID SKIN CONTACT DUE TO SENSITIZING POTENTIAL. CAUSES EYE IRRITATION.</p> <p><u>Hazard Statements (H):</u> H226 – Flammable liquid and vapor. H317 – May cause an allergic skin reaction. H320 – Causes eye irritation.</p> <p><u>Precautionary Statements (P):</u> 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/vapours/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. P280 – Wear protective gloves/protective clothing/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. 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).</p>	 
2.2	Effects of Exposure:	<p><u>Ingestion:</u> If product is swallowed, may cause nausea, vomiting and/or diarrhea and central nervous system depression.</p> <p><u>Eyes:</u> The liquid may produce eye discomfort and is capable of causing temporary impairment of vision and/or transient eye inflammation, ulceration. The vapor is discomforting to the eye. Splashes may cause severe eye irritation, possible corneal burns and eye damage. Moderately irritating to the eyes.</p> <p><u>Skin:</u> May be irritating to skin, especially after prolonged contact. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure.</p> <p><u>Inhalation:</u> Vapors of this product may be moderately 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 concentrated vapors can cause central nervous system depression (e.g., drowsiness, dizziness, headaches, nausea). Odor may give some warning of exposure, but odor fatigue may occur.</p>	
2.3	Symptoms of Overexposure:	<p><u>Ingestion:</u> Nausea, intestinal discomfort, vomiting and/or diarrhea and central nervous system depression.</p> <p><u>Eyes:</u> Symptoms of overexposure may include redness, itching, irritation and watering.</p> <p><u>Skin:</u> Symptoms of skin overexposure may include redness, itching, and irritation of affected areas.</p>	
2.4	Acute Health Effects:	Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can cause drowsiness, dizziness, headaches and nausea.	
2.5	Chronic Health Effects:	The material may aggravate any pre-existing dermatitis condition. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure.	
2.6	Target Organs:	Eyes, skin & respiratory system.	

NA = Not Available; ND = Not Determined; NE = Not Established; NF = Not Found; C = Ceiling Limit; See Section 16 for Additional Definitions of Terms Used
 NOTE: All WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-2010 format.


3. COMPOSITION & INGREDIENT INFORMATION

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m ³)									OTHER
					ACGIH		NOHSC			OSHA				
					TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH		
POLYURETHANE ACRYLATE PREPOLYMER RESIN	NA	NA	NA	60-100	500	750	250	1000	NF	1000	NA	2500		
BUTYL ACETATE	123-86-4	AF7350000	204-658-1	7-13	150	200	150	200	NF	200	200	1700	150 TWA	
Flammable Liquids 3; Specific Target Organ Toxicity – Single Exposure 3; H226, H336														
MAY ALSO CONTAIN:														
CI 77891 (TITANIUM DIOXIDE)	13463-67-7	XR2275000	236-675-5	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 75470 (CARMINE RED)	1328-60-5	NA	215-527-3	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 74160 (BLUE 15)	147-14-8	GL8510000	205-685-1	≤ 0.1	NA	NA	NA	NF	NF	NA	NA	NE		
CI 47005 (YELLOW 10)	8004-92-0	NA	305-897-5	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 77266 (BLACK 7)	1333-86-4	FF5800000	215-609-9	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 77004 (WHITE 19)	1318-74-7	NA	215-286-4	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 42090 (BLUE 1)	3844-45-9	BQ4725000	223-339-8	≤ 0.1	NA	NA	NA	NF	NF	NA	NA	NE		
CI 77007 (ULTRAMARINE)	57455-37-5	NA	309-928-3	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 15850 (RED 7)	5858-81-1	NA	227-497-9	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 19140 (YELLOW 23)	1934-21-0	UQ6400000	217-699-5	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 77492 (YELLOW 42)	51274-00-1	NA	257-098-5	≤ 0.1	NA	NA	NA	NF	NF	NA	NA	NE		
CI 77499 (BROWN 6)	52357-70-7	NA	257-870-1	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 15985 (YELLOW 6)	2783-94-0	ZF6680000	220-491-7	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
MICA	12001-26-2	VV8760000	310-127-6	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 16035 (RED 40)	25956-17-6	NA	247-368-0	≤ 0.1	NA	NA	NA	NF	NF	NA	NA	NE		
BUTENE, HOMOPOLYMER, HYDROGENATED	68937-10-0	NA	NA	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 19140 (YELLOW 5)	12225-21-7	NA	235-428-9	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 77510 (BLUE 27)	14038-43-8	NA	237-875-5	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
CI 77491 (IRON OXIDE)	1309-37-1	NO7400000	215-168-2	≤ 0.1	NA	NA	NA	NF	NF	NA	NA	NE		
CARMINE	1390-65-4	NA	215-724-4	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
TIN OXIDE	18282-10-5	XQ4000000	242-159-0	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
RUTILE (TiO ₂)	1317-80-2	VA8533500	215-282-2	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		
GLASS, OXIDE, CHEMICALS	65597-17-3	NA	NA	≤ 0.1	NA	NA	NA	NF	NF	NA	NA	NE		
POLYESTER GLITTER	NA	NA	NA	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA		

4. FIRST AID MEASURES

4.1	First Aid:	<p>Ingestion: 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 swallowed.</p> <p>Eyes: If product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. Open and close eyelid(s) to ensure thorough irrigation. Seek immediate medical attention. If problem persists, seek immediate medical attention.</p> <p>Skin: If irritation occurs & product is on the skin, rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with plenty of soap and water. Remove all contaminated clothing, including footwear and wash thoroughly before reuse. If irritation, redness or swelling persists, consult a physician immediately.</p> <p>Inhalation: Remove victim to fresh air at once. If breathing stops, perform artificial respiration. Seek immediate medical attention.</p>											
4.2	Medical Conditions Aggravated by Exposure:	Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin, and respiratory system).	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #0000FF; color: white;">HEALTH</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: #FF0000; color: white;">FLAMMABILITY</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="background-color: #FFA500; color: white;">PHYSICAL HAZARDS</td> <td style="text-align: center;">1</td> </tr> <tr> <td colspan="2" style="background-color: #000000; color: white;">PROTECTIVE EQUIPMENT</td> </tr> <tr> <td style="background-color: #000000; color: white;">EYES</td> <td style="background-color: #000000; color: white;">SKIN</td> </tr> </table>	HEALTH	2	FLAMMABILITY	3	PHYSICAL HAZARDS	1	PROTECTIVE EQUIPMENT		EYES	SKIN
HEALTH	2												
FLAMMABILITY	3												
PHYSICAL HAZARDS	1												
PROTECTIVE EQUIPMENT													
EYES	SKIN												

5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	This product is an extremely flammable liquid. When involved in a fire, this product may ignite and decompose to form toxic gases (e.g., CO, CO ₂ , NO _x).	
5.2	Extinguishing Methods:	Water, Foam, CO ₂ , Halon (if authorized), Dry Chemical	
5.3	Firefighting Procedures:	First responders should wear eye protection. Structural fire fighters must wear full protective equipment and MSHA/NIOSH-approved self-contained breathing apparatus. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas. If necessary, rinse contaminated equipment with soapy water before returning to service.	



6. ACCIDENTAL RELEASE MEASURES

6.1	Spills:	<p>Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment.</p> <p>For small spills (e.g., <1 gallon) 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.</p> <p>For large spills ≥ 1 gallon, 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 promptly and wash affected skin areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.</p>
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7. HANDLING & STORAGE INFORMATION

7.1	Work & Hygiene Practices:	Avoid prolonged contact with this material. Avoid breathing the vapors generated by this product. Use in a well-ventilated location (e.g., local exhaust ventilation, fans). Wash exposed skin thoroughly with plenty of soap & water after using this product. If necessary, use a moisturizer after washing. Do not eat, drink, or smoke while handling this product.
7.2	Storage & Handling:	Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans). Keep away from excessive heat, open flames, sparks, and other possible sources of ignition. Keep away from incompatible materials listed in Section 10. Do not store in damaged or unmarked containers or storage devices. Keep containers securely closed when not in use. Open slowly on a level, stable surface. Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care. As a precaution against exposure to the eyes, nose, throat and face, this product should not be stored higher than waist level. Keep away from children at all times!
7.3	Special Precautions:	Do not store where temperatures can exceed 50 °C (122 °F).

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1	Ventilation & Engineering Controls:	Use with adequate ventilation (e.g., local exhaust ventilation, fans). Ensure appropriate decontamination equipment is available (e.g., sink, safety shower, eye-wash station).	
8.2	Respiratory Protection:	No special respiratory protection is required under typical circumstances of use or handling. In instances where vapors or sprays of this product are generated, and respiratory protection is needed, use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or Australia.	
8.3	Eye Protection:	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.	
8.4	Hand Protection:	None required under normal conditions of use. However, may cause skin irritation in some sensitive individuals. When handling large quantities (e.g., ≥ 1 gallon), wear rubber or impervious plastic gloves.	
8.5	Body Protection:	No apron required when handling small quantities. When handling large quantities (e.g., ≥ 1 gallon), eye wash stations and deluge showers should be available. Upon completion of work activities involving large quantities of this product, wash any exposed areas thoroughly with soap and water.	

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Clear or pigmented liquid.
9.2	Odor:	NA
9.3	Odor Threshold:	NA
9.4	pH:	NA
9.5	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	NA
9.7	Flashpoint:	26.7 °C (80 °F), calc
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	Vapor Density: < 1 (air = 1)
9.11	Relative Density:	1.1
9.12	Solubility:	Not soluble.
9.13	Partition Coefficient (log P _{ow}):	NA
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	30,000 cPs
9.17	Other Information:	NA

10. STABILITY & REACTIVITY

10.1	Stability:	Relatively stable under ambient conditions when stored properly.
10.2	Hazardous Decomposition Products:	If exposed to extremely high temperatures , products of thermal decomposition may include irritating vapors and toxic 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.
10.5	Incompatible Substances:	Strong oxidizers, peroxides, strong acids or alkalis.

11. TOXICOLOGICAL INFORMATION

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. There are toxicology data for the components of the product, found in scientific literature, and are presented below: <u>Polyurethane Acrylate Prepolymer Resin</u> : LD ₅₀ (oral, rat) > 2000 mg/kg; <u>Butyl Acetate</u> : LD ₅₀ (oral, rat) = 10768 mg/kg		
11.3	Acute Toxicity:	See section 2.4.		
11.4	Chronic Toxicity:	See section 2.5.		
11.5	Suspected Carcinogen:	No		
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 2.3		
11.8	Biological Exposure Indices:	NA		
11.9	Physician Recommendations:	Treat symptomatically.		

12. ECOLOGICAL INFORMATION


12.1	Environmental Stability:	This product will slowly volatile from soil. Components of this product will slowly decompose into organic compounds. <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.
12.2	Effects on Plants & Animals:	There is no specific data available for this product.
12.3	Effects on Aquatic Life:	There is no specific data available for this product. Releases of large volumes may be harmful or fatal to overexposed aquatic life. Aquatic toxicity data for components of this product are available, but are not presented in this SDS.

13. DISPOSAL CONSIDERATIONS



13.1	Waste Disposal:	Dispose in accordance with local, state and Federal hazardous waste laws.
13.2	Special Considerations:	U.S. EPA Characteristic Waste: D001 (ignitability).

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, SCT, ADG and the CTDGR.

14.1	49 CFR (GND):	CONSUMER COMMODITY, ORM-D (IP VOL ≤ 0.5 L) – until 12/31/2020 UN1263, PAINT, 3, III, LTD QTY (IP VOL ≤ 5.0 L)	
14.2	IATA (AIR):	ID8000, CONSUMER COMMODITY, 9 (IP VOL ≤ 0.5 L) UN1263, PAINT, 3, III, LTD QTY (IP VOL ≤ 5.0 L)	
14.3	IMDG (OCN):	UN1263, PAINT, 3, III, LTD QTY (IP VOL ≤ 5.0 L)	
14.4	TDGR (Canadian GND):	MARK PACKAGE "LIMITED QUANTITY" or "QUANTITÉ LIMITÉE" or "LTD QTY" or "QUANT LTÉE" (IP VOL ≤ 5.0 L) UN1263, PAINT, 3, III, LTD QTY (IP VOL ≤ 5.0 L)	
14.5	ADR/RID (EU):	UN1263, PAINT, 3, III, LTD QTY (IP VOL ≤ 5.0 L)	
14.6	SCT (MEXICO):	UN1263, PINTURA, 3, III, CANTIDAD LIMITADA (IP VOL ≤ 5.0 L)	
14.7	ADGR (AUS):	UN1263, PAINT, 3, III, LTD QTY (IP VOL ≤ 5.0 L)	

15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product does not contain any substances subject to SARA Title III section 313 reporting requirements.	
15.2	SARA Threshold Planning Quantity:	NA	
15.3	TSCA Inventory Status:	All components of this product are listed in the TSCA Inventory or are exempt.	
15.4	CERCLA Reportable Quantity (RQ):	<u>Butyl Acetate</u> : 5,000 lbs (2,270 kg)	
15.5	Other Federal Requirements:	This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR subchapter G (Cosmetics).	
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/NDL. None of the components of this product are listed on the Priorities Substances List. Class B2 Flammable Liquid.	
15.7	State Regulatory Information:	<u>Butyl Acetate</u> is listed on the following state criteria list(s): Delaware Air Quality Management List (DE), Massachusetts Hazardous Substances List (MA), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), Pennsylvania Right-to-Know List (PA), and Washington Permissible Exposure Limits for Air Contaminants (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 (CA), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI).	
15.8	Other Requirements:	The primary component of this product is listed in Annex I of EU Directive 67/548/EEC: <u>Butyl Acetate</u> : Flammable (F). Harmful (Xi). <u>Risk Phrases (R)</u> : 11-36/37/38 – Highly flammable. Irritating to eyes, skin and respiratory system. <u>Safety Phrases (S)</u> : 2-7-16-24/25/26 – Keep out of the reach of children. Keep container tightly closed. Keep away from sources of ignition-No Smoking. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.	

16. OTHER INFORMATION

16.1	Other Information:		
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 & McConnell Labs' 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:	McConnell Labs, Inc. 406 S.W. Umatilla Ave. Redmond, OR 97756 USA Tel: +1 (541) 526-1417 Fax: +1 (541) 526-1418 http://www.lightelegance.com/	 McConnell Labs
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 <i>Dangerous Goods Training & Consulting</i>

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
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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.
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HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

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

HEALTH
FLAMMABILITY
PHYSICAL HAZARDS
PERSONAL PROTECTION

PERSONAL PROTECTION RATINGS:

A	
B	
C	
D	
E	
F	

G	
H	
I	
J	
K	
X	Consult your supervisor or SOPs for special handling directions.

Safety Glasses	Splash Goggles	Face Shield & Protective Eyewear	Gloves
Boots	Synthetic Apron	Protective Clothing & Full Suit	Dust Respirator
Full Face Respirator	Dust & Vapor Half-Mask Respirator	Full Face Respirator	Airline Hood/Mask or SCBA

OTHER STANDARD ABBREVIATIONS:

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

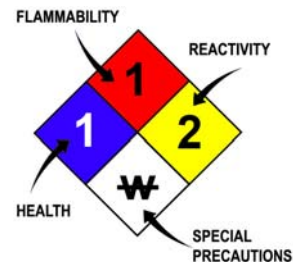
NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

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
W	Use No Water
OX	Oxidizer
TREFOIL	Radioactive



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 ₀₁	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD ₀₁ , LD ₀₁ , & LD ₀₂ or TC ₁ , TC ₀₁ , LC ₀₁ , & LC ₀₂	Lowest dose (or concentration) to cause lethal or toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TL _m	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	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:

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:

C	E	F	N	O	T	Xi	Xn
Corrosive	Explosive	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful

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

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