MATERIAL SAFETY DATA SHEET

CND-N-021

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS & 2001/58 EC Standards	MSDS Revision: 7.0	MSDS Revision Date: 04/01/2008

1. PRODUCT IDENTIFICATION

1.1	Product Name: **RETENTION+™**
1.2	Chemical Name: **ETHYL METHACRYLATE SOLUTION**
1.3	Synonyms: **RETENTION +®**
1.4	Trade Names: **Retention+™ Sculpting Liquid – Superior Adhesion**
1.5	Product Use: **PROFESSIONAL USE ONLY**
1.6	Distributor's Name: **CREATIVE NAIL DESIGN, INC.**
1.7	Distributor's Address: **1125 JOSHUA WAY, VISTA, CA USA 92081**
1.8	Emergency Phone: **CHEMTREC: +1 (800) 424-9300 / +1 (703) 527-3887**
1.9	Business Phone: **(800) 833-NAIL (6245), (760) 599-2900**

2. HAZARD 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). Flammable liquid.**						
2.2	Routes of Entry:	Inhalation:	**YES**	Absorption:	**YES**	Ingestion:	**YES**
2.3	Effects of Exposure: **INGESTION:** **If product is swallowed, may cause nausea, vomiting and/or diarrhea and central nervous system depression.** **EYES:** **Moderately irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation and watering.** **SKIN:** **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 skin exposure.** **INHALATION:** **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).**						
2.4	Symptoms of Overexposure: **EYES:** **Overexposure in eyes may cause redness, itching and watering.** **SKIN:** **Symptoms of skin overexposure may include redness, itching, and irritation of affected areas. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure.**						
2.5	Acute Health Effects: **EYES:** **Moderate irritation to eyes near affected areas.** **SKIN:** **Moderate irritation to skin near affected areas.** **INHALATION:** **High concentrations of vapors can cause drowsiness, dizziness, headaches and nausea.**						
2.6	Chronic Health Effects: **None known.**						
2.7	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 Z400.1-2004 format.

3. COMPOSITION & INGREDIENT INFORMATION

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m³) ACGIH ppm TLV	ACGIH ppm STEL	NOHSC ppm ES-TWA	NOHSC ppm ES-STEL	NOHSC ppm ES-PEAK	OSHA ppm PEL	OSHA ppm STEL	OSHA ppm IDLH	OTHER
ETHYL METHACRYLATE	97-63-2	OZ4550000	202-597-5	≤ 75.0	NE	NE	NF	NF	NF	NE	NE	NE	
HYDROXYPROPYL METHACRYLATE	923-26-2	UD3442500	248-666-3	< 15.0	NE	NE	NF	NF	NF	NE	NE	NE	
PEG-4 DIMETHACRYLATE	109-17-1	OZ4000000	203-653-1	< 15.0	NE	NE	NF	NF	NF	NE	NE	NE	
HEMA ACETOACETATE	21282-97-3	NA	244-311-1	< 15.0	NE	NE	NF	NF	NF	NE	NE	NE	
OTHER COMPONENTS PRESENT IN LESS THAN 1% CONCENTRATION				BAL	THE REMAINING COMPONENTS DO NOT CONTRIBUTE ANY SIGNIFICANT ADDITIONAL HAZARDS								

4. FIRST AID MEASURES

4.1 First Aid:

INGESTION: DO NOT INDUCE VOMITING. Contact ChemTrec at +1 (703) 527-3887 or the nearest Poison Control Center or local emergency telephone number for assistance and instructions. Seek immediate medical attention. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.

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.

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. Do not wear contaminated clothing until after it has been properly cleaned. If irritation, redness or swelling persists, consult a physician immediately and discontinue product use.

INHALATION: Remove victim to fresh air at once. Under extreme conditions, if breathing stops, perform artificial respiration and seek immediate medical attention.

4.2 Medical Conditions Aggravated by Exposure:

Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin, respiratory system).

5. FIREFIGHTING MEASURES

5.1 Flashpoint & Method:

76 °F (24 °C) TAGCC

5.2 Autoignition Temperature:

ND

5.3 Flammability Limits: Lower Explosive Limit (LEL): **NE** Upper Explosive Limit (UEL): **NE**

5.4 Fire & Explosion Hazards:

This product is a flammable liquid. When involved in a fire, this product may ignite and decompose to form toxic gases (e.g., CO, CO_2, NO_x).

5.5 Extinguishing Methods:

Water, Foam, CO_2 or Dry Chemical , as authorized.

5.6 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. Avoid extinguishing methods that may generate dust clouds. 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 small spills (e.g., < 1 gallon (3.785 liters)) 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 spills ≥ 1 gallon (3.785 liters), 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.

7. HANDLING & STORAGE INFORMATION

7.1 Work & Hygiene Practices:

Avoid prolonged contact with this material in its liquid form. Limit inhalation of 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. 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. Keep away from children at all times!

7.3 Special Precautions:

Local exhaust ventilation is recommended.

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.

8.4 Hand Protection:

None required under normal conditions of use. When handling large quantities (e.g., > 1 gallon (3.785 liters)), wear nitrile, rubber or other impervious gloves.

8.5 Body Protection:

No apron required when handling small quantities.

When handling large quantities (e.g., > 1 gallon (3.785 liters)), 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.

HEALTH	2
FLAMMABILITY	3
REACTIVITY	1
PROTECTIVE EQUIPMENT	A
EYES	

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Density:	**0.99 Calculated**
9.2	Boiling Point:	**213.8 °F (101 °C)**
9.3	Melting Point:	**< -103 °F (-75 °C)**
9.4	Evaporation Rate:	**NE**
9.5	Vapor Pressure:	**NE**
9.6	Molecular Weight:	**NE**
9.7	Appearance & Color:	**Clear violet liquid with an acrylic odor.**
9.8	Odor Threshold:	**NA**
9.9	Solubility:	**Slightly soluble.**
9.10	pH	**NA**
9.11	Viscosity:	**NE**
9.12	Other Information:	**Vapor density = 3.9 (Air = 1) Calculated**

10. STABILITY & REACTIVITY

10.1	Stability: **Relatively stable under ambient conditions when stored properly.**
10.2	Hazardous Decomposition Products: **If exposed to <u>extremely high temperatures</u>, products of thermal decomposition may include irritating vapors and toxic gases (e.g., oxides of carbon & nitrogen).**
10.3	Hazardous Polymerization: **May occur with quantities > 1 gallon (3.785 liters).**
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 or strong acids.**

11. TOXICOLOGICAL INFORMATION

11.1	Toxicity Data: **This product has not been tested on animals to obtain toxicological data. There are toxicology data for the components of this product, which are found in the scientific literature. These data have not been presented in this document.**	
11.2	Acute Toxicity: **See section 2.5**	
11.3	Chronic Toxicity: **No long term health effects are known.**	
11.4	Suspected Carcinogen: **NE**	
11.5	Reproductive Toxicity:	**This product is not reported to produce reproductive toxicity in humans.**
	Mutagenicity:	**This product is not reported to produce mutagenic effects in humans. However, animal mutation data available for certain components of this product were obtained during clinical studies on specific animal tissues exposed to high doses of those components.**
	Embryotoxicity:	**This product is not reported to produce embryotoxic effects in humans.**
	Teratogenicity:	**This product is not reported to produce teratogenic effects in humans.**
	Reproductive Toxicity:	**This product is not reported to produce reproductive effects in humans.**
11.6	Irritancy of Product: **See section 2.3**	
11.7	Biological Exposure Indices: **NE**	
11.8	Physician Recommendations: **Treat symptomatically.**	

12. ECOLOGICAL INFORMATION

12.1	Environmental Stability: **This product will slowly volatilize from soil. Components of this product will slowly decompose into organic compounds.**
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 MSDS.**

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORTATION INFORMATION

The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG, SCT, ADGR and the CTDGR.

14.1	49 CFR (GND): **CONSUMER COMMODITY, ORM-D (≤ 5.0 L)** **UN1993, FLAMMABLE LIQUID, N.O.S. (ETHYL METHACRYLATE, STABILIZED), 3, III (> 5.0 L)**
14.2	IATA (AIR): **CONSUMER COMMODITY, 9, ID8000 (≤ 0.5 L)** **UN1993, FLAMMABLE LIQUID, N.O.S. (ETHYL METHACRYLATE, STABILIZED), 3, III, LTD QTY (> 0.5 L, ≤ 5.0 L)** **UN1993, FLAMMABLE LIQUID, N.O.S. (ETHYL METHACRYLATE, STABILIZED), 3, III (> 5.0 L)**
14.3	IMDG (OCN): **UN1993, FLAMMABLE LIQUID, N.O.S. (ETHYL METHACRYLATE, STABILIZED), 3, III, LTD QTY (≤ 5.0 L)** **UN1993, FLAMMABLE LIQUID, N.O.S. (ETHYL METHACRYLATE, STABILIZED), 3, III (> 5.0 L)**
14.4	TDGR (Canadian GND): **MARK PACKAGE "LIMITED QUANTITY" or "QUANTITÉ LIMITÉE" or "LTD QTY" or "QUANT LTÉE" (≤ 5.0 L)** **UN1993, FLAMMABLE LIQUID, N.O.S. (ETHYL METHACRYLATE, STABILIZED), 3, III (> 5.0 L)**
14.5	ADR/RID (EU): **UN1993 FLAMMABLE LIQUID, N.O.S. (ETHYL METHACRYLATE, STABILIZED), 3, III, ADR, LTD QTY (≤ 5.0 L)**
14.6	SCT (MEXICO): **UN1993, LIQUIDOS INFLAMABLES, N.E.P. (ETHYL METHACRYLATE, STABILIZED),3, III, CANTIDAD LIMITADA (≤5.0 L)**
14.7	ADGR (AUS): **UN1993, FLAMMABLE LIQUID, N.O.S. (ETHYL METHACRYLATE, STABILIZED), 3, III, LTD QTY (≤ 5.0 L)**

15. REGULATORY INFORMATION

15.1	U.S. EPA SARA Title III Reporting Requirements: **SARA 304 (Ethyl Methacrylate)**
15.2	U.S. EPA SARA Title III Threshold Planning Quantity (TPQ): **NA**
15.3	U.S. TSCA Inventory Status: **All components of this product are listed in the TSCA Inventory or are exempt.**
15.4	U.S. CERCLA Reportable Quantity (RQ): **Ethyl Methacrylate: 1000 lbs**
15.5	Other U.S. 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 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 (PSL). Class B2 Flammable Liquid.**
15.7	U.S. State Regulatory Information: **Ethyl methacrylate is covered under specific state criteria. No components of this mixture are listed in the California Proposition 65 Lists.**
15.8	European Union 67/548/EEC and Australia NOHSC:2011 (2003) Requirements: **The primary components of this product are not listed in Annex I of EU Directive 67/548/EEC.** **<u>Ethyl Methacrylate</u>: Flammable, Irritant (F, Xi). R: 11-36/37/38-43 – Highly flammable. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. S: 2-9-16-29-33 – Keep out the reach of children. Keep container in a well-ventilated place. Keep away from sources of ignition - No smoking. Do not empty into drains. Take precautionary measures against static discharges.** **<u>Hydroxypropyl methacrylate:</u> (Xi) Irritant. R: 36-43 Irritating to eyes. May cause sensitization by skin contact. S: 2-24/25-26-37/39 Avoid contact with skin and eyes. In case of contact with eyes rinse, immediately with plenty of water and seek medical advice. Wear suitable gloves and eye face protection.** **HAZCHEM CODE: 3[Y]E . Poisons Schedule Number: S5**

16. OTHER INFORMATION

16.1	Other Information: WARNING: Precisely follow directions and MSDS (available through your supplier) for use. **Avoid all skin contact**. If redness or other signs of adverse reaction occur, discontinue use immediately. Use only in a well ventilated area. A ventilation system that expels vapors to the outdoors is recommended. Poisonous if swallowed! **Keep out of reach of children**. **FLAMMABLE**! Keep away from heat or flame. In case of emergency, contact your physician or local Poison Control Center immediately. FOR PROFESSIONAL USE ONLY.
16.2	Terms & Definitions: **Please see last page of this MSDS.**
16.3	Disclaimer: This Material 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 & Creative Nail Design's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are 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: **Creative Nail Design, Inc.** **A Division of Colomer U.S.A., Inc.** **1125 Joshua Way** **Vista, CA 92081 USA** **(800) 833-NAIL (6245) phone** **(760) 599-2900** **(760) 599-4005 fax** **http://www.cnd.com/** CND Hands. Feet. Beauty.
16.5	Prepared by: **ShipMate, Inc.** **PO Box 787** **Sisters, OR 97759-0787 USA** **Phone: +1 (310) 370-3600** **Fax: +1 (310) 370-5700** **e-mail: shipmate@shipmate.com** ShipMate Dangerous Goods Training & Consulting

MATERIAL SAFETY DATA SHEET

CND Hands. Feet. Beauty.

CND-N-021

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS & 2001/58 EC Standards | MSDS Revision: 7.0 | MSDS Revision Date: 04/01/2008

DEFINITION OF TERMS

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

GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number

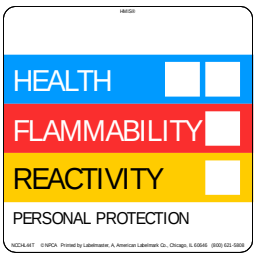
EXPOSURE LIMITS IN AIR:

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

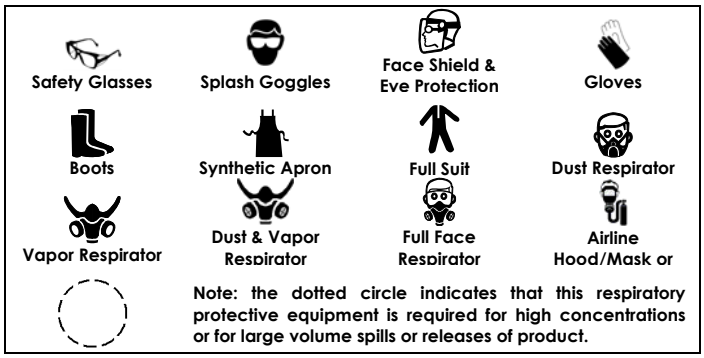


HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

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

PERSONAL PROTECTION RATINGS:

A	Safety Glasses
B	Safety Glasses, Gloves
C	Safety Glasses, Gloves, Boots
D	Safety Glasses, Gloves, Boots, Dust Respirator
E	Safety Glasses, Gloves, Dust & Vapor Respirator
F	Safety Glasses, Gloves, Boots, Dust & Vapor Respirator, Vapor Respirator
G	Safety Glasses, Gloves, Boots, Synthetic Apron
H	Safety Glasses, Gloves, Boots, Synthetic Apron, Dust Respirator
I	Safety Glasses, Gloves, Boots, Dust & Vapor Respirator
J	Safety Glasses, Gloves, Boots, Dust Respirator
K	Safety Glasses, Gloves, Boots, Full Suit
X	Consult your supervisor or S.O.P. for special handling directions.



FLAMMABILITY LIMITS IN AIR:

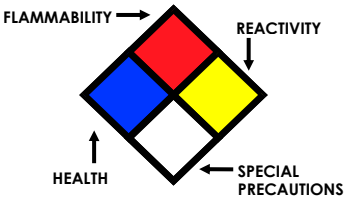
Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
UEL	Upper Explosive Limit - highest percent of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

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 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



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_{lo}, LD_{lo}, & LD_o or TC, TC_o, LC_{lo}, & LC_o	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)
CPR	Canada's Controlled Product Regulations

EC INFORMATION:

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

WHMIS INFORMATION:

A	B	C	D1	D2	D3	E	F
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive