# Material Safety Data Sheet

**1. PRODUCT IDENTIFICATION**

<table>
<thead>
<tr>
<th>1.1</th>
<th>Product Name:</th>
<th>SUPER MATTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>Chemical Name:</td>
<td>SOLVENT POLYMER BLEND</td>
</tr>
<tr>
<td>1.3</td>
<td>Synonyms:</td>
<td>SUPER MATTE</td>
</tr>
<tr>
<td>1.4</td>
<td>Trade Names:</td>
<td>SUPER MATTE – Matte Top Coat</td>
</tr>
<tr>
<td>1.5</td>
<td>Product Use:</td>
<td>COSMETIC USE ONLY</td>
</tr>
<tr>
<td>1.6</td>
<td>Distributor’s Name:</td>
<td>CREATIVE NAIL DESIGN, INC.</td>
</tr>
<tr>
<td>1.7</td>
<td>Distributor’s Address:</td>
<td>1125 JOSHUA WAY, VISTA, CA USA 92081</td>
</tr>
<tr>
<td>1.8</td>
<td>Emergency Phone:</td>
<td>CHEMTREC: +1 (800) 424-9300 / +1 (703) 527-3887</td>
</tr>
<tr>
<td>1.9</td>
<td>Business Phone:</td>
<td>(800) 833-NAIL (6245), (760) 599-2900</td>
</tr>
</tbody>
</table>

**2. HAZARD IDENTIFICATION**

<table>
<thead>
<tr>
<th>2.1</th>
<th>Hazard Identification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>This product is classified as a HAZARDOUS SUBSTANCE and as DANGEROUS GOODS according to the classification criteria of NOHSC:1888 (2004) and ADG Code (Australia).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.2</th>
<th>Routes of Entry:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation:</td>
<td>YES</td>
</tr>
<tr>
<td>Absorption:</td>
<td>YES</td>
</tr>
<tr>
<td>Ingestion:</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.3</th>
<th>Effects of Exposure:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INGESTION:</strong></td>
<td>If product is swallowed, may cause nausea, vomiting and/or diarrhea and central nervous system depression.</td>
</tr>
<tr>
<td><strong>EYES:</strong></td>
<td>Mildly to moderately irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation and watering.</td>
</tr>
<tr>
<td><strong>SKIN:</strong></td>
<td>May be irritating to skin in some sensitive individuals, especially after prolonged contact.</td>
</tr>
<tr>
<td><strong>INHALATION:</strong></td>
<td>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 &amp; Ingredient Information) can cause central nervous system depression (e.g., drowsiness, dizziness, headaches, nausea).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.4</th>
<th>Symptoms of Overexposure:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EYES:</strong></td>
<td>Overexposure in eyes may cause redness, itching and watering.</td>
</tr>
<tr>
<td><strong>SKIN:</strong></td>
<td>Symptoms of skin overexposure in some sensitive individuals may include redness, itching, and irritation of affected areas.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.5</th>
<th>Acute Health Effects:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EYES:</strong></td>
<td>Mild to moderate irritation to eyes near affected areas.</td>
</tr>
<tr>
<td><strong>SKIN:</strong></td>
<td>Mild to moderate irritation to skin near affected areas.</td>
</tr>
<tr>
<td><strong>INHALATION:</strong></td>
<td>High concentrations of vapors can cause drowsiness, dizziness, headaches and nausea.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.6</th>
<th>Chronic Health Effects:</th>
</tr>
</thead>
<tbody>
<tr>
<td>None known.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.7</th>
<th>Target Organs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes, skin &amp; respiratory system.</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>CHEMICAL NAME(S)</th>
<th>CAS No.</th>
<th>RTECS No.</th>
<th>EINECS No.</th>
<th>%</th>
<th>EXPOSURE LIMITS IN AIR (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ppm</td>
<td>TLV</td>
</tr>
<tr>
<td>BUTYL ACETATE</td>
<td>123-86-4</td>
<td>AF7350000</td>
<td>204-658-1</td>
<td>≤ 50.0</td>
<td>150</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>141-78-6</td>
<td>AH5425000</td>
<td>201-550-6</td>
<td>≤ 30.0</td>
<td>200</td>
</tr>
<tr>
<td>NITROCELLULOSE</td>
<td>9004-70-0</td>
<td>GW0970000</td>
<td>NA</td>
<td>≤ 20.0</td>
<td>(10)</td>
</tr>
<tr>
<td>ACETYL TRIBUTYL CITRATE</td>
<td>77-90-7</td>
<td>TB3330000</td>
<td>201-067-0</td>
<td>&lt; 10.0</td>
<td>NA</td>
</tr>
<tr>
<td>PHthalic Anhydride/Trimellitic Anhydride/Glycols Copolymer</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>&lt; 10.0</td>
<td>NA</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>67-63-0</td>
<td>NT0050000</td>
<td>200-661-7</td>
<td>≤ 5.00</td>
<td>400</td>
</tr>
<tr>
<td>HYDRATED SILICA</td>
<td>10279-57-9</td>
<td>VV7340000</td>
<td>215-683-2</td>
<td>&lt; 2.00</td>
<td>NA</td>
</tr>
<tr>
<td>ADIPIC ACID/1,4-BUTANEDIOL ACID/FUMARIC ACID/PHTHALIC ACID/1,4-BUTANEDIOL DIMETHANOL COPOLYMER</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>&lt; 2.00</td>
<td>NA</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>13463-67-7</td>
<td>XR2275000</td>
<td>236-675-5</td>
<td>≤ 0.20</td>
<td>10</td>
</tr>
</tbody>
</table>

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 ChemTec 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: Spills are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. Open and close eyelids(s) to ensure thorough irrigation. If irritation occurs, contact a physician.

SKIN: If irritation occurs and is on the skin, rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with soap and water. Do not wear contaminated clothing until after it has been properly cleaned. If irritation, redness or swelling persists, contact a physician immediately.

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:

None known.

5. FIREFIGHTING MEASURES

5.1 Flashpoint & Method:

24 °F (-4 °C) Estimated based on Butyl Acetate.

5.2 Autoignition Temperature:

ND

5.3 Flammability Limits:

Lower Explosive Limit (LEL): 1.7

Upper Explosive Limit (UEL): 12.7

5.4 Fire & Explosion Hazards:


5.5 Extinguishing Methods:

CO₂, Halon, Dry Chemical, Foam or Water as authorized.

5.6 Firefighting Procedures:

When involved in a fire, this product will ignite readily and decompose to produce carbon oxides. First responders should wear eye protection. Structural firefighters must wear SCBA's and full protective equipment. Use a water spray or fog to reduce or direct vapors. Water may not be effective in actually extinguish the fire involving this product.

HAZCHEM CODE: 3YE
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 spills 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 or repeated contact with skin. Avoid breathing vapors of this product. Use in a well-ventilated location (e.g., local exhaust ventilation, fans). Do not eat, drink or smoke while handling product.

7.2 Storage & Handling:
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, 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).

7.3 Special Precautions:
Open containers slowly on a stable surface. Keep container tightly closed when not in use. Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1 Ventilation & Engineering Controls:
When working with large quantities of product, provide adequate ventilation (e.g., local exhaust ventilation, fans). Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.

8.2 Respiratory Protection:
No special respiratory protection is required under normal conditions of use or handling. If necessary, use only respiratory protection authorized per U.S. OSHA’s requirement in 29 CFR §1910.134, or applicable U.S. state regulations, or the appropriate standards of Canada, its provinces, E.C. member states, or Australia.

8.3 Eye Protection:
None required under normal conditions of use. Avoid eye contact. May cause irritation in some sensitive individuals. When handling large quantities (e.g., ≥ 1 gallon (3.785 liters)), safety glasses with side shields should be used.

8.4 Hand Protection:
None required under normal conditions of use. May cause skin irritation in some sensitive individuals.

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

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>REACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

PROTECTIVE EQUIPMENT
## 9. PHYSICAL & CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>0.922 (H₂O = 1)</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>171-228 °F (77.2-108.8°C)</td>
</tr>
<tr>
<td>Melting Point</td>
<td>NA</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>(m-butyl Acetate = 1) &gt; 1.0</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>NA</td>
</tr>
<tr>
<td>Appearance &amp; Color</td>
<td>White semi-opaque viscous liquid with a sweet ester odor.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>ND</td>
</tr>
<tr>
<td>Solubility</td>
<td>Partially soluble in water.</td>
</tr>
<tr>
<td>pH</td>
<td>NA</td>
</tr>
<tr>
<td>Viscosity</td>
<td>NA</td>
</tr>
<tr>
<td>Other Information</td>
<td>VOC: 2.08 lb/gal</td>
</tr>
</tbody>
</table>

## 10. STABILITY & REACTIVITY

10.1 Stability: Stable under ambient conditions when stored properly (see Section 7, Storage and Handling).

10.2 Hazardous Decomposition Products: If exposed to extremely high temperatures, the products of thermal decomposition may include irritating vapors and carbon oxide gases (e.g., CO, CO₂).

10.3 Hazardous Polymerization: Will not occur.

10.4 Conditions to Avoid: Exposure to or contact with extreme temperatures, strong light sources or incompatible materials.

10.5 Incompatible Substances: This product is incompatible with strong oxidizers (e.g., peroxides, superoxides), strong acids (e.g., hydrochloric or sulfuric acids), or strong bases (e.g., lye, potassium hydroxide).

## 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 2.3

11.3 Chronic Toxicity: See section 2.6

11.4 Suspected Carcinogen: Yes. This product contains Isopropyl Alcohol, which is classified as a Group 3 carcinogen (not classifiable as a human carcinogen) by the IARC.

11.5 Reproductive Toxicity: This product is not reported to produce reproductive toxicity in humans.

11.6 Mutagenicity: This product is not reported to produce mutagenic effects in humans.

11.7 Embryotoxicity: This product is not reported to produce embryotoxic effects in humans.

11.8 Teratogenicity: This product is not reported to produce teratogenic effects in humans.

## 11.8 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:

Butyl Acetate: $K_{OC} = 1.62$. Water solubility: 120 parts $H_2O$ 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.

Ethyl Acetate: $K_{OC} = 0.73$. 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.

Isopropyl Alcohol: 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.

12.3 Effects on Aquatic Life:

There are no specific data available for this product; however, very large releases of this product may be harmful or fatal to overexposed aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Disposal:

Dispose of in accordance with all federal, state, and local regulations.

13.2 Special Considerations:

U.S. EPA WASTE NUMBER: D001 (characteristic - ignitable)

14. TRANSPORTATION INFORMATION

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

14.1 49 CFR (ORM-D):

CONSUMER COMMODITY, ORM-D ($\leq 1.0$ L)

UN1263, PAINT, 3, II ($>1.0$ L)

14.2 IATA (ADR):

CONSUMER COMMODITY, 9, ID6800 ($\leq 0.5$ L)

UN1263, PAINT, 3, II ($>0.5$ L)

14.3 IMDG (ICAO):

UN1263, PAINT, 3, II, LTD QTY ($\leq 1.0$ L)

UN1263, PAINT, 3, II ($>1.0$ L)

14.4 TDGR (Canadian GNDR):

MARK PACKAGE "LIMITED QUANTITY" or "QUANTITÉ LIMITÉE" or "LTD QTY" or "QUANTITÉ LIMITÉE" ($\leq 1.0$ L)

UN1263, PAINT, 3, II ($>1.0$ L)

14.5 ADR/RID (EU):

UN1263, PAINT, 3, 3 "(b)", ADR, LTD QTY ($\leq 1.0$ L)

14.6 SCT (MEXICO):

UN1263, PINTURA (INFLAMMABLE), 3, II, CANTIDAD LIMITADA ($\leq 1.0$ L)

14.7 ADGR (AUS):

UN1263, PAINT, 3, 3 "(b)", LTD QTY ($\leq 1.0$ L)
15. REGULATORY INFORMATION

15.1 U.S. EPA SARA Title III Reporting Requirements:
No chemicals are reportable under Section 313.
SARA 304 (40 CFR Table 302.4) - Butyl Acetate, Ethyl Acetate

15.2 U.S. EPA SARA Title III Threshold Planning Quantities (TPQ):
There are no specific Threshold Planning Quantities for the components of this product.

15.3 U.S. U.S. TSCA Inventory Status:
The components of this product are listed on the TSCA inventory.

15.4 U.S. CERCLA Reportable Quantity (RQ):
Butyl Acetate: 2268 kg; 5000 lbs. Ethyl Acetate: 2268 kg; 5000 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. Class B2 Flammable Liquid.

15.7 U.S. State Regulatory Information:
Butyl Acetate, Ethyl Acetate, and Isopropyl Alcohol are covered under specific state criteria.
Components of this product are not listed on the California Proposition 65 lists or they are exempt from the requirements.

15.8 European Union 67/548/EEC and Australia NOHSC 2011 (2005) Requirements:
The primary components of this product are not listed in Annex I of EU Directive 67/548/EEC.
Isopropanol: Flammable (F). R: 11-34/37 - Highly flammable. Irritating to eyes and respiratory system. 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.
HAZCHEM CODE: 3YE.
Poisons Schedule Number: ND
16. OTHER INFORMATION

16.1 Other Information:
WARNING: EXTREMELY FLAMMABLE! Keep away from heat or flame. Avoid inhalation. Store in a cool place. Keep out of reach of children.

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 related 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/

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
MATERIAL SAFETY DATA SHEET

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

EXPOSURE LIMITS IN AIR:
- ACGLH
- TLV
- OSHA
- PMEL
- IDLH

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: Light Hazard
  - 2: Moderate Hazard
  - 3: Severe Hazard
  - 4: Extreme Hazard

PERSONAL PROTECTION RATINGS:
- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- K
- L
- M
- N
- O
- P
- Q
- R
- S
- T
- U
- V
- W
- X

FLAMMABILITY LIMITS IN AIR:
- Lower Explosive Limit (LEL)
- Upper Explosive Limit (UEL)

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: Light Hazard
- 2: Moderate Hazard
- 3: Severe Hazard
- 4: Extreme Hazard
- A: Acidic
- B: Basic
- C: Corrosive
- D: Dry
- W: Water
- OX: Oxidizer

HEALTH PHYSICAL TOXICOLOGICAL INFORMATION:
- LDT: Lethal Dose (rats & mice) which kills 50% of the exposed animals
- LC50: Lethal concentration (gases) which kills 50% of the exposed animal
- ppm: Concentration expressed in parts of material per million parts
- TDL: Lowest dose to cause a symptom
- TCL: Lowest concentration to cause a symptom
- TDL, TCL, LEC, LC50 or LD50, LEC, LC50, LEC: 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
- RCF: Risk Concentration Factor
- TLV: Tolerable Threshold Limit
- Kow or 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
- DSC: Canadian Domestic Substances List
- NDSL: Canadian Non-Domestic Substance List
- PSIC: Canadian Priority Substances List
- TSCA: U.S. Toxic Substance Control Act
- CCR: Canada's Controlled Products Regulations

EC INFORMATION:

WHMIS INFORMATION: