

06115001



MATERIAL SAFETY DATA SHEET

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 CND- N-118

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: PERFECT COLOR SHIMMER SCULPTING POWDERS |
| 1.2 | Chemical Name: METHACRYLATE COPOLYMER BLEND |
| 1.3 | Synonyms: METRO POWDERS, METRO METAL POWDERS: CITY OF ANGELS (COPPER), CITY OF LIGHTS (SILVER), CITY OF PEACE (WHITE), SIN CITY (BLACK), GOLDEN CITY (GOLD), MELTING POT (BROWN) |
| 1.4 | Trade Names: Perfect Color Shimmer Powders: Black Shimmer Opaque ; Brown Shimmer Semi-Sheer ; Charcoal Shimmer Semi Sheer ; Copper Shimmer Semi Sheer; Gold Shimmer Semi-Sheer; Iridescent Glitter Sheer; Silver Shimmer Semi-Sheer; White Shimmer Opaque |
| 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 not classified as a HAZARDOUS SUBSTANCE or as DANGEROUS GOODS according to the classification criteria of NOHSC: 1088 (2004) and ADG Code (Australia). | | | | | | |
| 2.2 | Routes of Entry: | Inhalation: | YES | Absorption: | NO | Ingestion: | YES |
| 2.3 | Effects of Exposure: EYES: Possible irritation from dust. SKIN: Irritation. Allergic contact dermatitis is possible with prolonged or repeated contact. INGESTION: No exposure effects are reported. INHALATION: Considered a nuisance dust. May cause irritation of the mouth, nose, throat, and lungs. | | | | | | |
| 2.4 | Symptoms of Overexposure: EYES: Redness & watering. SKIN: Redness, itching, drying of skin. INGESTION: No symptoms are expected. INHALATION: Upper respiratory irritation, including coughing & sneezing. | | | | | | |
| 2.5 | Acute Health Effects: EYES: Possible irritation from dust. SKIN: Irritation. Allergic contact dermatitis is possible with prolonged or repeated contact. INGESTION: No exposure effects are reported. INHALATION: Considered a nuisance dust. May cause irritation of the mouth, nose, throat, and lungs. | | | | | | |
| 2.6 | Chronic Health Effects: None known. | | | | | | |
| 2.7 | Target Organs: Eyes, skin and 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.



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3. COMPOSITION & INGREDIENT INFORMATION

| CHEMICAL NAME(S) | CAS No. | RETECS No. | EINECS No. | % | EXPOSURE LIMITS IN AIR (mg/m ³) | | | | | | | | |
|------------------------|-----------|------------|------------|---------|---|------|-------|----|----|------|----|----|-------|
| | | | | | ACGIH | | NOHSC | | | OSHA | | | OTHER |
| | | | | | ppm | | ppm | | | ppm | | | |
| TLV | STEL | ES-TWA | ES-STEL | ES-PEAK | PEL | STEL | IDLH | | | | | | |
| POLYETHYLMETHACRYLATE | 9003-42-3 | NA | NA | ≤ 45.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| METHACRYLATE COPOLYMER | NA | NA | NA | ≤ 45.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| BENZOYL PEROXIDE | 94-36-0 | DM8575000 | 202-327-6 | < 2.0 | (5) | NE | 5 | NF | NF | (5) | NE | NE | |

ADDITIONAL INGREDIENTS:

| | | | | | | | | | | | | | |
|-----------------------------------|-------------|-----------|-----------|--------|------|----|-----|----|----|----|----|------|----------|
| BLACK SHIMMER OPAQUE: | | | | | | | | | | | | | |
| POLYETHYLENE TEREPHTHALATE | 25038-59-9 | TR2725000 | NA | ≤ 15.0 | NE | NE | NF | NF | NF | NE | NE | NE | (5) AEI* |
| CI 77499 (BLACK) | 12227-89-3 | NA | 215-168-2 | ≤ 10.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| BROWN SHIMMER SEMI-SHEER: | | | | | | | | | | | | | |
| POLYETHYLENE TEREPHTHALATE | 25038-59-9 | TR2725000 | NA | < 15.0 | NE | NE | NF | NF | NF | NE | NE | NE | (5) AEI* |
| MICA | 12001-26-2 | NA | 310-127-6 | < 15.0 | (3) | NA | 2.5 | NF | NF | NA | NA | DUST | |
| CI 77499 (BLACK) | 12227-89-3 | NA | 215-168-2 | < 10.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| CI 77491 | 1317-61-9 | NA | 215-277-5 | < 1.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| TITANIUM DIOXIDE | 13463-67-7 | XR2275000 | 236-675-5 | < 1.0 | (10) | NE | NF | NF | NF | NE | NE | NE | DUST |
| CI 77000 (ALUMINUM POWDER) | 7429-90-5 | BD3300000 | 231-072-3 | < 1.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| CHARCOAL SEMI-SHEER: | | | | | | | | | | | | | |
| POLYETHYLENE TEREPHTHALATE | 25038-59-9 | TR2725000 | NA | < 15.0 | NE | NE | NF | NF | NF | NE | NE | NE | (5) AEI* |
| CI 77000 (ALUMINUM POWDER) | 7429-90-5 | BD3300000 | 231-072-3 | < 1.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| COPPER SHIMMER SEMI-SHEER: | | | | | | | | | | | | | |
| POLYETHYLENE TEREPHTHALATE | 25038-59-9 | TR2725000 | NA | < 15.0 | NE | NE | NF | NF | NF | NE | NE | NE | (5) AEI* |
| CI 77000 (ALUMINUM POWDER) | 7429-90-5 | BD3300000 | 231-072-3 | < 1.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| CI 16035 (RED 40 LAKE) | 25956-17-6 | NA | 247-368-0 | < 1.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| GOLD SHIMMER SEMI-SHEER: | | | | | | | | | | | | | |
| POLYETHYLENE TEREPHTHALATE | 25038-59-9 | TR2725000 | NA | < 15.0 | NE | NE | NF | NF | NF | NE | NE | NE | (5) AEI* |
| CI 77000 (ALUMINUM POWDER) | 7429-90-5 | BD3300000 | 231-072-3 | < 1.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| CI 9140 (YELLOW 5 LAKE) | 1934-21-0 | UQ6400000 | 217-699-5 | < 1.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| CI 16035 (RED 40 LAKE) | 25956-17-6 | NA | 247-368-0 | < 1.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| IRIDESCENT GLITTER SHEER: | | | | | | | | | | | | | |
| POLYBUTYLENE TEREPHTHALATE | 26062-94-2 | NA | NA | < 2.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| TITANIUM DIOXIDE | 13463-67-7 | XR2275000 | 236-675-5 | < 0.1 | (10) | NE | NF | NF | NF | NE | NE | NE | DUST |
| SILVER SHIMMER SEMI-SHEER: | | | | | | | | | | | | | |
| MICA | 12001-26-2 | NA | 310-127-6 | < 5.0 | (3) | NA | 2.5 | NF | NF | NA | NA | NE | DUST |
| TITANIUM DIOXIDE | 13463-67-7 | XR2275000 | 236-675-5 | < 1.0 | (10) | NE | NF | NF | NF | NE | NE | NE | DUST |
| WHITE SHIMMER OPAQUE: | | | | | | | | | | | | | |
| POLYBUTYLENE TEREPHTHALATE | 26062-94-2 | NA | NA | < 6.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| MICA | 12001-26-2 | NA | 310-127-6 | < 5.0 | (3) | NA | 2.5 | NF | NF | NA | NA | NE | DUST |
| ACRYLATES COPOLYMER | 215133-97-5 | NA | NA | < 3.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| BORON NITRIDE | 10043-11-5 | ED7800000 | 233-136-6 | < 3.0 | NE | NE | NF | NF | NF | NE | NE | NE | |
| TITANIUM DIOXIDE | 13463-67-7 | XR2275000 | 236-675-5 | < 3.0 | (10) | NE | NF | NF | NF | NE | NE | NE | DUST |

OTHER COMPONENTS PRESENT IN LESS THAN 1% CONCENTRATION | BAL | THE REMAINING COMPONENTS DO NOT CONTRIBUTE ANY SIGNIFICANT ADDITIONAL HAZARDS

* DuPont Chemical Company

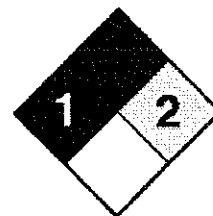
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4. FIRST AID MEASURES

| | |
|-----|--|
| 4.1 | <p>First Aid:</p> <p>EYES: Flush eyes thoroughly with copious amounts of water for at least 15 minutes, holding eyelid(s) open to ensure complete flushing. If irritation persists, seek immediate medical attention.</p> <p>SKIN: Remove contaminated clothing and wash affected areas with soap and water. Wash all contaminated clothing thoroughly before reuse. If irritation persists, seek medical attention.</p> <p>INGESTION: Contact ChemTrec at +1 (703) 527-3887 or the nearest Poison Control Center or local emergency telephone number for assistance and instructions. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.</p> <p>INHALATION: Remove victim to fresh air at once. Under extreme conditions, if breathing stops, perform artificial respiration and seek medical attention.</p> |
| 4.2 | <p>Medical Conditions Aggravated by Exposure: Pre-existing dermatitis, asthma or bronchitis.</p> |

5. FIREFIGHTING MEASURES

| | |
|-----|---|
| 5.1 | Flashpoint & Method: 579 °F (304 °C) ICC |
| 5.2 | Autoignition Temperature: NA |
| 5.3 | Flammability Limits: Lower Explosive Limit (LEL): NA Upper Explosive Limit (UEL): NA |
| 5.4 | Fire & Explosion Hazards: NA |
| 5.5 | Extinguishing Methods: Carbon dioxide, dry chemical & water spray as authorized. |
| 5.6 | Firefighting Procedures: Keep containers cool until well after the fire is out. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters should wear full face, self-contained breathing apparatus (MSHA/NIOSH approved or the equivalent) and impervious protective clothing. |



6. ACCIDENTAL RELEASE MEASURES

| | |
|-----|--|
| 6.1 | <p>Spills:</p> <p>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). Spilled product should be swept or vacuumed up immediately to prevent falls. 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 spills ≥ 1 gallon (3.785 liters), deny entry to all unprotected individuals. Spilled product should be swept or vacuumed up immediately to prevent falls. Transfer to containers for proper disposal. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.</p> |
|-----|--|

7. HANDLING & STORAGE INFORMATION

| | |
|-----|---|
| 7.1 | <p>Work & Hygiene Practices:</p> <p>Use eye protection when using this product. Wash hands thoroughly after using this product and before eating, drinking, or smoking.</p> |
| 7.2 | <p>Storage & Handling:</p> <p>Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans). Keep away from excessive heat. Do not store in damaged or unmarked containers or storage devices. Keep containers securely closed when not in use.</p> |
| 7.3 | <p>Special Precautions:</p> <p>Empty containers may retain residual amounts of product. Therefore, empty containers should be handled with care. The product is a fine powder, and may cause a slipping and falling hazard if spilled. Spilled product should be swept or vacuumed up immediately to prevent falls.</p> |

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8. EXPOSURE CONTROLS & PERSONAL PROTECTION

| | |
|-----|--|
| 8.1 | Ventilation & Engineering Controls: General mechanical ventilation (e.g., fans) and local exhaust ventilation is recommended for use with this product. |
| 8.2 | Respiratory Protection: Respirators are not required for use with this product. However, this product is a nuisance dust hazard. Product may cause irritation of the mouth, nose, throat, and lungs. Accordingly, when working with large quantities (> gallon) a dust mask is suggested. A respiratory protection program that meets OSHA's 29 CFR §1910.134 and ANSI Z88.2 requirements must be followed whenever a respirator is used. |
| 8.3 | Eye Protection: Safety glasses with side shields should be used when using this product. |
| 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. |

| | |
|-----------------------------|----------|
| HEALTH | 1 |
| FLAMMABILITY | 0 |
| REACTIVITY | 2 |
| PROTECTIVE EQUIPMENT | A |
| EYES | |

9. PHYSICAL & CHEMICAL PROPERTIES

| | | |
|------|---------------------|---|
| 9.1 | Density: | NA |
| 9.2 | Boiling Point: | NA |
| 9.3 | Melting Point: | Approximately 392 °F (200 °C) |
| 9.4 | Evaporation Rate: | NA |
| 9.5 | Vapor Pressure: | NA |
| 9.6 | Molecular Weight: | NA |
| 9.7 | Appearance & Color: | Metallic colored powders with faint bland odor. |
| 9.8 | Odor Threshold: | ND |
| 9.9 | Solubility: | Insoluble |
| 9.10 | pH | NA |
| 9.11 | Viscosity: | NA |
| 9.12 | Other Information: | NA |

10. STABILITY & REACTIVITY

| | |
|------|--|
| 10.1 | Stability: Stable under normal conditions of use (see section 7). |
| 10.2 | Hazardous Decomposition Products: Oxides of carbon and nitrogen. |
| 10.3 | Hazardous Polymerization: Highly unlikely, but will occur if large quantity of product comes in contact with an equally large quantity of monomer. |
| 10.4 | Conditions to Avoid: High heat 120 °F (48.8 °C) and proximity to monomers. (Large quantities only, e.g. > 1 gallon (3.785 liters)). |
| 10.5 | Incompatible Substances: Monomer. (Large quantities only, e.g. > 1 gallon (3.785 liters)). |



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11. TOXICOLOGICAL INFORMATION

| | |
|------|--|
| 11.1 | Toxicity Data: This product has NOT been tested on animals to obtain toxicology data. There are toxicology data for the components of the product, which are found in scientific literature. These data have not been presented in this document. Titanium Dioxide (CAS#13463-67-7); IARC classification: Group 2B - Possibly carcinogenic to humans. [NOTE- Applies to inhalation of raw titanium dioxide particles.] |
| 11.2 | Acute Toxicity: See section 2.5 |
| 11.3 | Chronic Toxicity: See section 2.6 |
| 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. |
| | 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. |

13. DISPOSAL CONSIDERATIONS

| | |
|------|--|
| 13.1 | Waste Disposal: Dispose of in accordance with all federal, state, and local regulations. |
| 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): NOT REGULATED | |
| 14.2 | IATA (AIR): NOT REGULATED | |
| 14.3 | IMDG (OCN): NOT REGULATED | |
| 14.4 | IDGR (Canadian GND): NOT REGULATED | |
| 14.5 | ADR/RID (EU): NOT REGULATED | |
| 14.6 | SCT (MEXICO): NOT REGULATED | |
| 14.7 | ADGR (AUS): NOT REGULATED | |



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15. REGULATORY INFORMATION

| | |
|------|---|
| 15.1 | U.S. EPA SARA Title III Reporting Requirements: This product does not contain any substances with SARA reporting requirements. |
| 15.2 | U.S. EPA SARA Title III Threshold Planning Quantity (TPQ): This product does not contain any substances with a SARA threshold planning quantity. |
| 15.3 | U.S. TSCA Inventory Status: All chemical substances of this product are listed on the TSCA inventory or are otherwise exempt from inventory status. |
| 15.4 | U.S. CERCLA Reportable Quantity (RQ): This product does not contain any substances with a CERCLA reportable quantity. |
| 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. |
| 15.7 | U.S. State Regulatory Information: No component of this mixture is listed in the California Proposition 65 Lists. Titanium dioxide (CAS# 13463-67-7); can be found on the following state right to know lists: New Jersey, Pennsylvania, Minnesota, and Massachusetts. |
| 15.8 | European Union 67/548/EEC and Australia NOHSC:2011 (2003) Requirements: Component(s) of this product are listed in Annex I of EU Directive 67/548/EEC. (Xn) Harmful Titanium dioxide: R: 21/22 Harmful if swallowed and in contact with skin R: 40 Limited evidence of carcinogenic effect * R: 43 May cause sensitization by skin contact S: 2 Keep away from children S: 7/8 Keep container tightly closed and dry S: 20/21 When using do not eat, drink or smoke *Applies to Inhalation of raw titanium dioxide particles. |





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MSDS Revision: 7.0

MSDS Revision Date: 04/01/2008

16. OTHER INFORMATION

16.1 Other Information:

WARNING: Precisely follow directions and MSDS (available through your supplier) for use. Avoid skin and eye contact. Keep out of reach of children. If redness or other signs of adverse reaction occur, discontinue use immediately and thoroughly rinse affected area. **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:

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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.
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Phone: +1 (310) 370-3600
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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 |

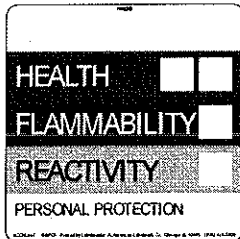
FIRST AID MEASURES:

| | |
|-----|--|
| 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 | [Goggles] | G | [Goggles, Gloves, Respirator] |
| B | [Goggles, Gloves] | H | [Goggles, Gloves, Apron, Respirator] |
| C | [Goggles, Gloves, Apron] | I | [Goggles, Gloves, Respirator] |
| D | [Goggles, Gloves, Apron, Respirator] | J | [Goggles, Gloves, Apron, Respirator, Full Face Respirator] |
| E | [Goggles, Gloves, Respirator] | K | [Goggles, Gloves, Apron, Respirator, Full Face Respirator, Boots] |
| F | [Goggles, Gloves, Apron, Respirator, Full Face Respirator] | X | Consult your supervisor or S.O.P. for special handling directions. |

| | | | |
|------------------|-------------------------|------------------------------|----------------------|
| Safety Glasses | Splash Goggles | Face Shield & Eye Protection | Gloves |
| Boots | Synthetic Apron | Full Suit | Dust Respirator |
| Vapor Respirator | Dust & Vapor Respirator | Full Face Respirator | Airline Hood/Mask or |

Note: the dotted circle indicates that this respiratory protective equipment is required for high concentrations or for large volume spills or releases of product.

FLAMMABILITY LIMITS IN AIR:

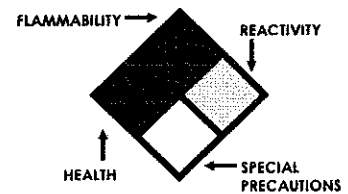
| | |
|--------------------------|---|
| Autoignition Temperature | Minimum temperature required to initiate combustion in air with no other source of ignition |
| LEL | Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source |
| 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 |
| 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 ₀₁ or TC, TC ₀₁ , LC ₀₁ , & LC ₀₁ | 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:

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|-------|--|
| 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:

| | | | | | | | |
|-----------|-----------|-----------|---------|-----------|-------|----------|---------|
| | | | | | | | |
| Corrosive | Explosive | Flammable | Harmful | Oxidizing | Toxic | Irritant | Harmful |

WHMIS INFORMATION:

| | | | | | | | |
|------------|-----------|-----------|-------|------------|------------|-----------|----------|
| | | | | | | | |
| Compressed | Flammable | Oxidizing | Toxic | Irritation | Infectious | Corrosive | Reactive |