



SAFETY DATA SHEET

Page 1 of 7
MSDS-E-6404338a
RadioShack® #6404338

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

MSDS Revision: 4.0

MSDS Revision Date: 08/22/2012

1. PRODUCT IDENTIFICATION

| | |
|-----|--|
| 1.1 | Product Name: DeoxIT® D-Series, DN5MS-15, 5% Spray, RadioShack® (P/N 640-4338), 14 g |
| 1.2 | Chemical Name: See ingredients listed in section 3 |
| 1.3 | Synonyms: DeoxIT®, DN5MS-15, 5% Spray |
| 1.4 | Trade Names: DeoxIT®, DN5MS-15, 5% Spray |
| 1.5 | Product Use: Clean, deoxidize & improve electrical contacts & connectors |
| 1.6 | Manufacturer's Name: CAIG Laboratories, Inc. |
| 1.7 | Manufacturer's Address: 12200 Thatcher Court, Poway, CA 92064-6876 USA |
| 1.8 | Emergency Phone: CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-3887 |
| 1.9 | Business Phone: +1 (800)-224-4123 |

2. HAZARD IDENTIFICATION

| | | | | | |
|-----|--|--|--|------------------------|-----------------------|
| 2.1 | Hazard Identification: This product is classified as a HAZARDOUS SUBSTANCE but not as DANGEROUS GOODS according to the classification criteria of NOHSC: 1008(2004) and ADG Code (Australia). WARNING. Contains gas under pressure; may explode if heated. Colorless, volatile liquid with ethereal and faint sweetish odor. Non-flammable material. Overexposure may cause dizziness and loss of concentration. At higher levels, CNS depression and cardiac arrhythmia may result from exposure. Vapors displace air and can cause asphyxiation in confined spaces. At high temperatures (>250°C), decomposition products may include Hydrofluoric Acid (HF) and carbonyl halides. Hazard Statements (H): H280 – Contains gas under pressure; may explode if heated. Precautionary Statements (P): P280 – Wear protective gloves and eye protection. P305+P351+P338 – IF IN EYES - Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. P410 + P403 – Protect from sunlight. Store in a well-ventilated place. P501 – Dispose of contents/container through licensed treatment, storage or disposal facility. | | | | |
| 2.2 | Routes of Entry: | Inhalation: YES | | Absorption: YES | Ingestion: YES |
| 2.3 | Effects of Exposure: | EYES: "Frostbite-like" effects may occur if the liquid or escaping vapors contact the eyes. Mists may cause irritation. SKIN: "Frostbite-like" effects may occur if the liquid or escaping vapors contact the eyes. Mists may cause irritation. INGESTION: Not considered to be a potential route of exposure. INHALATION: Gross overexposure may cause central nervous system depression, dizziness, confusion, incoordination, drowsiness, irregular heartbeat accompanied by a strange feeling in the chest, "heart thumping," apprehension, light-headedness, weakness, fainting, loss of consciousness, and death. | | | |
| 2.4 | Symptoms of Exposure: | EYES: No exposure symptoms are reported by the manufacturer. SKIN: No exposure symptoms are reported by the manufacturer. INGESTION: Not considered to be a potential route of exposure. INHALATION: Dizziness, confusion, incoordination, drowsiness, irregular heartbeat accompanied by a strange feeling in the chest, "heart thumping", apprehension, light-headedness, weakness, fainting, loss of consciousness, and death. | | | |
| 2.5 | Acute Health Effects: | EYES: "Frostbite-like" effects may occur if the liquid or escaping vapors contact the eyes. Mists may cause irritation. SKIN: "Frostbite-like" effects may occur if the liquid or escaping vapors contact the eyes. Mists may cause irritation. INGESTION: Not considered to be a potential route of exposure. INHALATION: Gross overexposure may cause central nervous system depression, dizziness, confusion, incoordination, drowsiness, irregular heartbeat accompanied by a strange feeling in the chest, "heart thumping", apprehension, light-headedness, weakness, fainting, loss of consciousness, and death. | | | |
| 2.6 | Chronic Health Effects: | The manufacturer has not reported any chronic health effects. | | | |
| 2.7 | Target Organs: | None reported by the manufacturer. | | | |
| 2.8 | Toxicological Properties: | None reported by the manufacturer. | | | |

NA = Not Available; ND = Not Determined; NE = Not Established; 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.



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Page 2 of 7
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3. COMPOSITION & INGREDIENT INFORMATION

| CHEMICAL NAME(S) | CAS No. | RTECS No. | EINECS No. | % | EXPOSURE LIMITS IN AIR (mg/m³) | | | | | | | | OTHER |
|------------------------------|--------------|-----------|------------|--------|--------------------------------|------|--------|---------|---------|------|------|------|-------|
| | | | | | ACGIH | | NOHSC | | | OSHA | | | |
| | | | | | ppm | | ppm | | | ppm | | | |
| | | | | | TLV | STEL | ES-TWA | ES-STEL | ES-PEAK | PEL | STEL | IDLH | |
| 1,1,1,3,3-PENTAFLUOROPROPANE | 460-73-1 | UNK | 419-170-6 | 60-100 | 300 | NE | NF | NF | NF | NA | NE | NE | |
| ISOBUTANE | 75-28-5 | TZ4300000 | 200-857-2 | 10-30 | NE | NE | NF | NF | NF | 15 | NE | NE | |
| DeoxIT® D100L | TRADE SECRET | NA | NA | 3-7 | NE | NE | NF | NF | NF | NA | NE | NE | |

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. If irritation persists, seek prompt medical attention. Do not wear contaminated clothing until after it has been properly cleaned.</p> <p>INGESTION: Drink plenty of water. If irritation persists, contact a physician.</p> <p>INHALATION: Remove victim to fresh air at once. If breathing is difficult, administer supplemental oxygen and seek immediate medical attention. If breathing stops, perform artificial respiration.</p> | | | | | | | | | | |
| 4.2 | <p>Medical Conditions Aggravated by Exposure:</p> <p>None reported by the manufacturer.</p> <table border="1" style="width: 100%;"> <tr> <td style="background-color: #0000FF; color: white;">HEALTH</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="background-color: #FF0000; color: white;">FLAMMABILITY</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="background-color: #FFD700;">PHYSICAL HAZARDS</td> <td style="text-align: center;">0</td> </tr> <tr> <td>PROTECTIVE EQUIPMENT</td> <td style="text-align: center;">B</td> </tr> <tr> <td>EYES</td> <td>SKIN</td> </tr> </table> | HEALTH | 1 | FLAMMABILITY | 1 | PHYSICAL HAZARDS | 0 | PROTECTIVE EQUIPMENT | B | EYES | SKIN |
| HEALTH | 1 | | | | | | | | | | |
| FLAMMABILITY | 1 | | | | | | | | | | |
| PHYSICAL HAZARDS | 0 | | | | | | | | | | |
| PROTECTIVE EQUIPMENT | B | | | | | | | | | | |
| EYES | SKIN | | | | | | | | | | |

5. FIREFIGHTING MEASURES

| | |
|-----|--|
| 5.1 | Flashpoint & Method: Level 1 aerosol. |
| 5.2 | Autoignition Temperature: 412 °C (774 °F) – 1,1,1,3,3-Pentafluoropropane |
| 5.3 | Flammability Limits: Lower Explosive Limit (LEL): NA Upper Explosive Limit (UEL): NA |
| 5.4 | <p>Fire & Explosion Hazards:</p> <p>Cylinders may rupture under fire conditions. This material will become combustible when mixed with air under pressure and exposed to strong ignition sources. Decomposition may occur. Contact of welding or soldering torch flames with high concentrations of refrigerant can result in visible changes in the size and color of the torch flame. The flame effect will only occur in concentrations of product well above the recommended exposure limit, therefore stop all work and ventilate the area before proceeding. Use forced ventilation to disperse refrigerant vapors from the work area before using any open flames.</p> |
| 5.5 | Extinguishing Methods: CO₂, Alcohol foam, Dry Chemical, Water Fog |
| 5.6 | <p>Firefighting Procedures:</p> <p>Wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing. Use a water spray to cool containers involved in fire. Do not use direct water stream. Container storage areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure. Keep containers cool until well after the fire is out to prevent rupture. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway.</p> |





SAFETY DATA SHEET

Page 3 of 7
MSDS-E-6404338a
RadioShack® #6404338

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MSDS Revision: 4.0

MSDS Revision Date: 08/22/2012

6. ACCIDENTAL RELEASE MEASURES

| | |
|-----|---|
| 6.1 | Spills: Secure spill area, remove or minimize all sources of ignition, and maximize ventilation. Stop spill or leak at source if safely possible. Deny entry to all unprotected individuals. Individuals involved in the cleanup must wear appropriate personal protective equipment. Recover free liquid or cover with inert absorbent material and place into appropriate container(s) for disposal. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers or any natural waterway or drinking supply. Contact appropriate local and/or provincial authorities for assistance and/or reporting requirements. |
|-----|---|

7. HANDLING & STORAGE INFORMATION

| | |
|-----|---|
| 7.1 | Work & Hygiene Practices: Use normal hygiene practices. Avoid direct skin contact. Wash hands thoroughly after using this product and before eating, drinking, or smoking. |
| 7.2 | Storage & Handling: Use and store in a cool, dry, well-ventilated area. Keep away from excessive heat, open flames, sparks, and other possible sources of ignition. Do not store near or with any incompatible materials listed in section 10. Do not store in unmarked or open containers. Protect cylinders from physical damage. Do not store in subsurface areas. |
| 7.3 | Special Precautions: Readily available emergency fire, first aid, and spill response equipment and/or measures are highly recommended. |

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

| | |
|-----|---|
| 8.1 | Ventilation & Engineering Controls: Normal ventilation for standard manufacturing procedures is generally adequate. Local exhaust should be used when large amounts are released. Mechanical ventilation should be used in low or enclosed places. Refrigerant concentration monitors may be necessary to determine vapor concentrations in work areas prior to use of torches or other open flames, or if employees are entering enclosed areas. |
| 8.2 | Respiratory Protection: A respiratory protection program that meets ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirators use. |
| 8.3 | Eye Protection: Safety glasses with side shields should be used with this product. If splashing is anticipated, splash goggles and a faceshield are recommended. |
| 8.4 | Hand Protection: Where contact is likely, impervious gloves are recommended. Do not wear rings, watches, or jewelry that could entrap the material against the skin. |
| 8.5 | Body Protection: None required under normal conditions. |

9. PHYSICAL & CHEMICAL PROPERTIES

| | | |
|------|--------------------------------|--|
| 9.1 | Density: | NA |
| 9.2 | Boiling Point: | 15 °C (59 °F) - 1,1,1,3,3-Pentafluoropropane |
| 9.3 | Melting Point: | NA |
| 9.4 | Evaporation Rate: | NA |
| 9.5 | Vapor Pressure: | 50 +/- 5 psig @ 20 °C |
| 9.6 | Molecular Weight: | NA |
| 9.7 | Appearance & Color: | Light red, aerosol |
| 9.8 | Odor Threshold: | Ethereal/hydrocarbon odor |
| 9.9 | Solubility: | Not soluble in water |
| 9.10 | pH | NA |
| 9.11 | Viscosity: | ND |
| 9.12 | Other Information: VOC Content | 268 gms/L |



SAFETY DATA SHEET

Page 4 of 7
MSDS-E-6404338a
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MSDS Revision: 4.0

MSDS Revision Date: 08/22/2012

10. STABILITY & REACTIVITY

| | |
|------|--|
| 10.1 | Stability: Stable under normal conditions of use (see section 7). |
| 10.2 | Hazardous Decomposition Products: Change in color signifies exposure to ultraviolet light or exceeding shelf life. Will not degrade to unstable products. Discard solution. |
| 10.3 | Hazardous Polymerization: Will not occur. |
| 10.4 | Conditions to Avoid: Use or storage near open flames, sparks, high heat (>100 °F) or other heat sources, and proximity to incompatible substances and heavily trafficked areas. |
| 10.5 | Incompatible Substances: Strong oxidizers. |

11. TOXICOLOGICAL INFORMATION

| | |
|------|---|
| 11.1 | Toxicity Data: 1,1,1,3,3-Pentafluoropropane: Acute Dermal (rabbit) – LD₅₀ > 2,000 mg/kg; Cardiac Sensitization (dogs) – No effects noted at 35,000 ppm, the threshold for induction of cardiac arrhythmias in the presence of injected adrenalin was 44,000 ppm. Acute Inhalation (rat): 4-hr. LC₅₀ > 200,000 ppm. No lethality at 200,000 ppm. Evidence of transient anesthetic effect. Acute Inhalation (mouse): 4-hr. LC₅₀ > 100,000 ppm. No lethality at 100,000 ppm. Evidence of transient under activity during exposure. |
| 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 volatile 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: 1,1,1,3,3-Pentafluoropropane: Partition Coefficient: Log P_{OW} = 1.35 @ 21.5°C; Acute toxicity to Daphnia magna (Limit Test): NOEC > 97.9 mg/L; 48 hr. EC₅₀ > 97.9 mg/L. Acute toxicity to Rainbow Trout (Limit Test): NOEC > 10 mg/L; 96 hr. EC₅₀ > 81.8 mg/L |

13. DISPOSAL CONSIDERATIONS

| | |
|------|--|
| 13.1 | Waste Disposal: Dispose of in accordance with federal, state or local regulations. |
| 13.2 | Special Considerations: NA |



SAFETY DATA SHEET

Page 5 of 7
MSDS-E-6404338a
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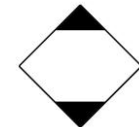
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14. TRANSPORTATION INFORMATION

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, DOT-SP 10232 (IP VOL ≤ 1.0 L) - * authorized until 01/01/2014 UN1950, AEROSOLS, 2.2, LTD QTY (IP VOL ≤ 1.0 L) |
| 14.2 | IATA (AIR): UN1950, AEROSOLS, 2.2, LTD QTY (IP VOL ≤ 820 ml) |
| 14.3 | IMDG (OCN): UN1950, AEROSOLS, 2.2, LTD QTY (IP VOL ≤ 1.0 L) |
| 14.4 | TDGR (Canadian GND): MARK PACKAGE "LIMITED QUANTITY" or "QUANTITÉ LIMITÉE" or "LTD QTY" or "QUANT LTÉE" (IP VOL ≤ 1.0 L) |
| 14.5 | ADR/RID (EU): UN1950, AEROSOLS, 2.2, LTD QTY (IP VOL ≤ 1.0 L) |
| 14.6 | SCT (MEXICO): UN1950, AEROSOLS, 2.2, CANTIDAD LIMITADA (IP VOL ≤ 1.0 L) |
| 14.7 | ADGR (Australia): UN1950, AEROSOLS, 2.2, LTD QTY (IP VOL ≤ 1.0 L) |



15. REGULATORY INFORMATION

| | |
|------|--|
| 15.1 | SARA Reporting Requirements: NA |
| 15.2 | SARA Threshold Planning Quantity: NA |
| 15.3 | TSCA Inventory Status: All chemical substances of this product are listed on the TSCA inventory or are otherwise exempt from inventory status. |
| 15.4 | CERCLA Reportable Quantity (RQ): NA |
| 15.5 | Other Federal Requirements: Contains HFC-245fa, a greenhouse gas, a substance which may contribute to global warming. Regulated under Section 612 (SNAP) of the Clean Air Act and 40 CFR Part 82, subpart G. |
| 15.6 | Other Canadian Regulations This product has been classified according to the hazard criteria of the Controlled Products Regulations (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 | State Regulatory Information: The primary components of this product are not listed on any of the following state criteria lists: California OSHA; California Proposition 65; Massachusetts Right to Know List of Chemicals; New Jersey Right to Know List 8:59 Appendix A; Pennsylvania Hazardous Substances List 34 323 Appendix A; Wisconsin Hazardous Substances List NR 605.09; Minnesota Hazardous Substances List; and Florida Toxic Substances List. |



| | |
|------|---|
| 15.8 | 67/548/EEC (European Union) Requirements: The primary components of this product are not listed in Annex I of EU Directive 67/548/EEC. WARNING. Contains gas under pressure; may explode if heated. Colorless, volatile liquid with ethereal and faint sweetish odor. Non-flammable material. Overexposure may cause dizziness and loss of concentration. At higher levels, CNS depression and cardiac arrhythmia may result from exposure. Vapors displace air and can cause asphyxiation in confined spaces. At high temperatures (>250°C), decomposition products may include Hydrofluoric Acid (HF) and carbonyl halides. Hazard Statements (H): H280 – Contains gas under pressure; may explode if heated. Precautionary Statements (P): P280 – Wear protective gloves and eye protection. P305+P351+P338 – IF IN EYES - Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. P410 + P403 – Protect from sunlight. Store in a well-ventilated place. P501 – Dispose of contents/container through licensed treatment, storage or disposal facility. |
|------|---|





SAFETY DATA SHEET

Page 6 of 7

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16. OTHER INFORMATION

16.1 Other Information:

NA

16.2 Terms & Definitions:

See page 7 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 & CAIG Laboratories, Inc.'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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Fax: +1 (858) 486-8398 fax
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16.5 Prepared by:

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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 |

| |
|---------------------|
| HEALTH |
| FLAMMABILITY |
| PHYSICAL HAZARDS |
| PERSONAL PROTECTION |

PERSONAL PROTECTION RATINGS:

| | | | |
|----------|--|----------|--|
| A | | G | |
| B | | H | |
| C | | I | |
| D | | J | |
| E | | K | |
| F | | X | Consult your supervisor or SOPs for special handling directions. |

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

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

OTHER STANDARD ABBREVIATIONS:

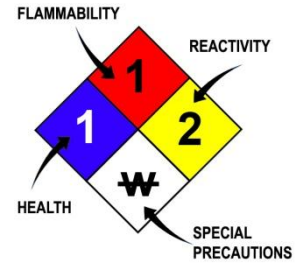
| | |
|------|------------------------------------|
| NA | Not Available |
| NR | No Results |
| NE | Not Established |
| ND | Not Determined |
| ML | Maximum Limit |
| SCBA | Self-Contained Breathing Apparatus |

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 ₅₀ or TC, TC ₀₁ , LC ₀₁ , & LC ₅₀ | 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 |
| TLm | Median threshold limit |
| log Kow or log 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 |
| 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:

| | | | | | | | |
|------------|-----------|-----------|-------|------------|------------|-----------|----------|
| | | | | | | | |
| A | B | C | D1 | D2 | D3 | E | 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 |