



MATERIAL SAFETY DATA SHEET

Derustit SS-3™ Stainless Steel Cleaner (Liquid and Paste)

Section 1: PRODUCT AND COMPANY IDENTIFICATION

| | |
|-------------------------------|---|
| Product Name: | Derustit SS-3 Stainless Steel Cleaner (Liquid and Paste) |
| Product Use: | Cleaner. |
| Manufacturer/Supplier: | Bradford Derustit Corp. 21660 Waterford Dr. Yorba Linda, CA 92887 |
| Phone Number: | 1-877-899-5315 |
| International: | 1-714-695-0899 |
| Emergency Phone: | 1-800-424-9300 |
| International: | 1-703-527-3887 (collect) |
| Web site: | www.derustit.com |
| Email: | sales@derustit.com |
| Date of Preparation: | March 29, 2011 |

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

VERY TOXIC BY INHALATION. HARMFUL IN CONTACT WITH SKIN. IRRITATING TO EYES. IRRITATING TO SKIN.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Eye: Irritating to eyes.

Skin: Harmful in contact with skin. Irritating to skin.

Ingestion: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

Inhalation: Very toxic by inhalation. May cause respiratory tract irritation.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Prolonged contact can cause severe eye irritation, redness and pain. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Prolonged contact can cause pain, blisters, and serious skin burns.

Medical Conditions Aggravated By Exposure: Because of its irritating properties, product may aggravate pre-existing skin, eye, and respiratory conditions.

Target Organs: Skin, eyes, gastrointestinal tract, respiratory system.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

This product is a hazardous chemical as defined by NOM-018-STPS-2000.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient | UN Number | H / F / R / Special* | CAS # | Wt. % |
|-------------------|-----------|----------------------|------------|---------|
| Sulfuric acid | UN1832 | 3/0/2/W | 7664-93-9 | 10 - 30 |
| Nitric acid | UN2032 | 4/0/0/OX | 7697-37-2 | 5 - 10 |
| Hydrofluoric Acid | UN1790 | 4/0/1 | 7664-39-3 | 1 - 5 |
| Ammonium fluoride | UN2505 | 3/0/0 | 12125-01-8 | 1 - 5 |

* Per NOM-018-STPS-2000

Section 4: FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

Flammability: Not flammable by WHMIS/OSHA criteria.

Means of Extinguishing:

Suitable Extinguishing Media: Powder, water spray, foam, carbon dioxide.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: May include, and are not limited to: oxides of carbon, oxides of nitrogen, oxides of sulfur, acidic vapours.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

Protection of Firefighters: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental Precautions: Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

Methods for Containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Clean-Up: Scoop up material and place in a disposal container.

Other Information: Not available.

Section 7: HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage: Keep locked up and out of reach of children. Keep container tightly closed and in a well-ventilated place.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

| Ingredient | Exposure Guidelines | |
|-------------------|---------------------|-----------------------|
| | OSHA-PEL | ACGIH-TLV |
| Sulfuric acid | 1 mg/m ³ | 0.2 mg/m ³ |
| Nitric acid | 2 ppm | 2 ppm |
| Hydrofluoric Acid | 3 ppm | 0.5 ppm |
| Ammonium fluoride | Not available. | Not available. |

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

Eye/Face Protection: Wear approved eye protection (properly fitted dust- or splashproof chemical safety goggles) and face protection (face shield).

Hand Protection: Wear suitable gloves.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---------------------------------|
| Appearance: | Liquid / Paste-like compound. |
| Color: | Brown. |
| Odour: | Acidic. |
| Odour Threshold: | Not available. |
| Physical State: | Liquid / Solid. |
| pH: | 2.35 |
| Viscosity: | Not available. |
| Freezing Point: | Not available. |
| Boiling Point: | ~ 102 °C (~ 215.6 °F) |
| Flash Point: | Not available. |
| Evaporation Rate: | 1 (Water = 1) |
| Lower Flammability Limit: | Not available. |
| Upper Flammability Limit: | Not available. |
| Vapor Pressure: | -3.88°C @21.1°C (25°F @70°F) |
| Vapor Density: | 1 (Air = 1) |
| Specific Gravity: Liquid = | 1.2, Paste = 1.7 |
| Solubility in Water: Liquid = | Complete, Paste = Partial |
| Coefficient of Water/Oil Distribution: | Not available. |
| Auto-ignition Temperature: | Not available. |
| Percent Volatile, wt. %: | Not available. |
| VOC content, wt. %: | Not available. |

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Reducing agents. Alkalies.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon, oxides of nitrogen, oxides of sulfur, acidic vapours.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

| Component Analysis | Ingredient | IDLH | LD ₅₀ (oral) | LC ₅₀ |
|--------------------|----------------------|-----------------|---------------------------------|------------------|
| Sulfuric acid | 15 mg/m ³ | 2140 mg/kg, rat | 510 mg/m ³ 2hrs, rat | |
| Nitric acid | 25 ppm | Not available. | 130 mg/m ³ 4hrs, rat | |
| Hydrofluoric Acid | 30 ppm | Not available. | 850 mg/m ³ 1 hr, rat | |
| Ammonium fluoride | Not available. | Not available. | Not available. | |

Eye: Irritating to eyes. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Prolonged contact can cause severe irritation, redness and pain.

Skin: Harmful in contact with skin. Irritating to skin. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Prolonged contact can cause pain, blisters, and serious skin burns.

Ingestion: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

Inhalation: Very toxic by inhalation. May cause respiratory tract irritation.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Hazardous by WHMIS/OSHA criteria.

Carcinogenicity: Not hazardous by WHMIS/OSHA criteria.

| Ingredient | Chemical Listed as Carcinogen or Potential Carcinogen * |
|-------------------|---|
| Sulfuric acid | Not listed. |
| Nitric acid | Not listed. |
| Hydrofluoric Acid | Not listed. |
| Ammonium fluoride | Not listed. |

* See Section 15 for more information.
Mutagenicity: Not hazardous by WHMIS/OSHA criteria.

Reproductive Effects: Not hazardous by WHMIS/OSHA criteria.

Developmental Effects:

Teratogenicity: Not hazardous by WHMIS/OSHA criteria.

Embryotoxicity: Not hazardous by WHMIS/OSHA criteria.

Respiratory Sensitization: Not hazardous by WHMIS/OSHA criteria.

Skin Sensitization: Not hazardous by WHMIS/OSHA criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: May cause long-term adverse effects in the aquatic environment.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Section 14: TRANSPORTATION INFORMATION

DOT Classification

UN1760, Corrosive Liquids, n.o.s. (Sulfuric Acid, Nitric Acid), 8, III
ORM-D (< 0.1L)

TDG Classification

UN1760, Corrosive Liquids, n.o.s. (Sulfuric Acid, Nitric Acid), 8, III
Limited Quantity (< 0.1L)

NOM-004-SCT2-1994 Classification

UN1760, Corrosive Liquids, n.o.s. (Sulfuric Acid, Nitric Acid), 8, III
Limited Quantity (< 0.1L)

Section 15: REGULATORY INFORMATION

Federal Regulations

Canadian: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

US: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200).

Mexico: MSDS prepared pursuant to NOM-018-STPS-2000.

| SARA Title III | | | | |
|-------------------|------------------------------|---------------------------|------------------|--------------------------|
| Ingredient | Section 302 (EHS) TPQ (lbs.) | Section 304 EHS RQ (lbs.) | CERCLA RQ (lbs.) | Section 313 |
| Sulfuric acid | 1,000 | 1,000 | 1,000 | 313 (aerosol forms only) |
| Nitric acid | 1,000 | 1,000 | 1,000 | 313 |
| Hydrofluoric Acid | 100 | 100 | 100 | 313 |
| Ammonium fluoride | Not listed. | Not listed. | 100 | Not listed. |

State Regulations

California Proposition 65: This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

| Global Inventories | | |
|--------------------|-----------------|----------|
| Ingredient | Canada DSL/NDSL | USA TSCA |
| Sulfuric acid | DSL. | Yes. |
| Nitric acid | DSL. | Yes. |
| Hydrofluoric Acid | DSL. | Yes. |
| Ammonium fluoride | DSL. | Yes. |

HMIS - Hazardous Materials Identification System

Health - 2*, Flammability - 0, Physical Hazard - 1

NFPA - National Fire Protection Association:

Health - 2*, Fire - 0, Reactivity - 1

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

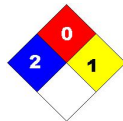
Class D1A - Very Toxic Material

Class D2A - Chronic Toxic Effects

WHMIS Hazard Symbols:



Mexico Classification:



Blue = Health, Red = Flammability, Yellow = Reactivity, White = Special

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

OSHA (O)

Occupational Safety and Health Administration.

ACGIH (G)

American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.

A2 - Suspected human carcinogen.

A3 - Animal carcinogen.

A4 - Not classifiable as a human carcinogen.

A5 - Not suspected as a human carcinogen.

IARC (I)

International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.

2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.

3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.

4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N)

National Toxicology Program.

1 - Known to be carcinogens.

2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Disclaimer: The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.