

# Freedom Tuff 2270 Polyol

## MATERIAL SAFETY DATA

Date of Printing: 01/20/08

### SECTION I - NAME

Product Name: **Freedom Tuff 2270 Polyol**

Manufactured By: Freedom Chemical Corporation  
12026 Centralia Road, Suite C  
Hawaiian Gardens, CA 90716  
562-343-9697

FOR CHEMICAL Spill, leak, fire, exposure, or EMERGENCY accident, call 24 hours CHEMTREC:  
800.424.9300

TSCA Inventory: All components of this product are included, or are exempt from inclusion, in the EPA Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Canadian DSL: All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List (DSL).

### SECTION II - HAZARDOUS INGREDIENTS

| Hazardous Components  | CAS#       | % WEIGHT | ACGIH TLV      | OSHA PEL % by Wt |
|-----------------------|------------|----------|----------------|------------------|
| Polyoxyalkylene amine | 9046-10-0  | 70-80%   | Not Determined | Not Determined   |
| Polyether polyol      | mixture    | 0-20%    | Not Determined | Not Determined   |
| Diethylene glycol     | 111-46-6   | 1-10%    | Not Determined | Not Determined   |
| Diethyltoluenediamine | 68479-98-1 | 5-20%    | Not Determined | Not Determined   |

### SECTION III - HAZARDS IDENTIFICATION

Emergency Overview:

Routes of Entry: Route Entry Risk

|                     |          |
|---------------------|----------|
| <b>Inhalation</b>   | Possible |
| <b>Ingestion</b>    | Possible |
| <b>Skin Contact</b> | Possible |
| <b>Eye Contact</b>  | Possible |

Potential Health Effects: Corrosive to skin and eyes.

**Inhalation**- May cause respiratory tract irritation.

**Ingestion**- Harmful if swallowed.

**Skin Contact**- Corrosive to the skin. Causes skin burns.

**Eye Contact**- Corrosive to the eye

Corrosive liquid. Prolonged or repeated contact may cause dermatitis

Carcinogenicity:

**OSHA:** No data **ACGIH:** No data **NTP:** No data **IARC:** No data

Other:

#### **SECTION IV - FIRST AID MEASURES**

**Eye Contact:** Immediately flush with plenty of water for at least 15 minutes. If redness, itching, or a burning sensation develops, seek medical attention immediately.

**Skin Contact:** Remove from skin immediately. Rinse with clean water for 20-30 minutes. Use soapy water if needed. Seek medical attention immediately.

**Ingestion:** Do NOT induce vomiting! Seek medical attention immediately.

**Inhalation:** Move victim to fresh air immediately. Give oxygen and seek medical attention.

#### **SECTION V - FIRE FIGHTING MEASURES**

Flammable Limits: Not determined  
**Flash Point, (Method Used):** >200° Fahrenheit (Pensky Marten Closed)  
**Autoignition Temperature:**

| <b>NFPA Hazard Rating:</b> | <b>Hazard Scale:</b> | <b>Protective Equipment</b>        |
|----------------------------|----------------------|------------------------------------|
| <b>Health:</b>             | 0=LEAST              | A=SAFETY GLASSES                   |
| <b>Flammability:</b>       | 1=SLIGHT             | B=SAFETY GLASSES, GLOVES           |
| <b>Reactivity:</b>         | 2=MODERATE           | C=SAFETY GLASSES, GLOVES AND APRON |
| <b>Other:</b>              | 3=HIGH               |                                    |
|                            | 4=EXTREME            |                                    |

**HMIS Hazard Rating:**  
**Health:** 2  
**Flammability:** 0  
**Reactivity:** 0  
**Protection:**

**Extinguishing Media:** Foam/Carbon dioxide/Dry Chemical/Water fog.  
**Special Fire Fighting Procedures:** Remove all ignition sources. Wear self-contained breathing apparatus and complete personal protective equipment when entering confined areas where potential for exposure to vapors or products exist.

#### **SECTION VI - ACCIDENTAL RELEASE MEASURES**

**Accidental Release Measures:** Avoid contact with material. Persons not wearing appropriate protective equipment should be excluded until spill is cleaned up. Stop spill at source, pump liquid to salvage container. Remaining liquid may be taken up on clay, diatomaceous earth, or other absorbent. Prevent product from entering drains. Do not flush into sanitary sewer system.

#### **SECTION VII - HANDLING and STORAGE**

**Handling & Storage Precautions:** Prevent all skin and eye contact. Avoid breathing vapors. Re-seal partially used containers. Wash with soap and water before eating or drinking. Keep away from all ignitable sources as well as extreme heat.

## **SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION**

**Ventilation:** Adequate ventilation required, especially in confined areas.

**Respiratory Protection:** Respiratory masks should be worn at all times. A NIOSH/MSHA respirator is acceptable.

**Eye Protection:** Chemical tight goggles and full face shield if splashing is possible.

**Skin Protection:** Coveralls and impervious foot covering is recommended.

**Other Protective Clothing or Equipment:** Use impervious gloves.

**Work/ Hygienic Practices:** Good air flow in working area. Eyewash station and safety shower should be available. Gloves and respiratory equipment should be worn at all times.

## **SECTION IX - PHYSICAL and CHEMICAL PROPERTIES**

**Appearance:** yellowish

**Odor:** Slight Amine

**Physical State:** Liquid

**Boiling Point:** >250 C

**Melting Point:** NA

**Freezing Point:** ND

**Vapor Pressure (mmHg):** = No Data

**Vapor Density (Air=1):** No Data

**Specific Gravity (Water=1):** 1.014

**Evaporation Rate (Butyl Acetate=1):** No Data

**Solubility in Water:** slight

**Percent Solids by Weight:** 100%

**Percent Volatile (grams/liter):** NA

**Volatile Organic Compounds (VOC) (grams/liter):** NA

## **SECTION X - STABILITY and REACTIVITY**

**Stability:** Stable at normal conditions.

**Conditions to Avoid (Stability):** Avoid excessive heat, open flame, sparks and strong oxidizing agents and reducing agents. Replace outage with inert dry nitrogen.

**Incompatibility (Materials to Avoid):** Avoid acid, base (alkalis, ammonia) and oxidizing agents.

**Hazardous Decomposition or Byproducts:** No decomposition if used as directed. Under conditions giving incomplete combustion, hazardous gases produced may consist of carbon dioxide, carbon monoxide, nitrogen oxides.

## **SECTION XI - TOXICOLOGICAL INFORMATION**

**Toxicological Information Acute Toxicity):**

**ORAL LD50:** Polyether polyol to be >5000 mg/kg (rats)

LD50 for diethylene glycol is 12510 mg/kg (rat).

**DERMAL LD50:** > 5,000 mg/kg (rats)

**INHALATION LC50:** No Data

**Skin Irritation:** Material is corrosive to skin.

**Eye Irritation:** Since the material is corrosive to the skin, it is expected to have a similar effect with the eye.

Product is a blend of material that has been shown to be Ames Negative (non mutogenic)

## SECTION XII – ECOLOGICAL INFORMATION

Ecological Information: not expected to be toxic

## SECTION XIII – DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Dispose of according to current local, state, and federal regulations.

**RCRA Hazard Class:** Non-Regulated

## SECTION XIV – TRANSPORT INFORMATION

### U.S. Department of Transportation

This product is not regulated by D.O.T. when shipped domestically by land.

ID Number:

Packing Group: II

Label Statement: Corrosive

### Water Transportation

Proper Shipping Name:

Hazard Class:

ID Number:

Packing Group:

Label Statement: Corrosive

### Air Transportation

Proper Shipping Name:

Hazard Class:

ID Number:

Packing Group:

Label Statement: Corrosive

**Other Agencies:**

## SECTION XV – REGULATORY INFORMATION

### U.S. Federal Regulations

**TSCA (Toxic Substance Control Act):** All ingredients are listed on the TSCA Chemical Substance Inventory.

**CERCLA (Comprehensive Response Compensation and Liability Act):** CERCLA section 103(a) specifically requires the person in charge of a vessel or facility to report immediately to the National Response Center (NRC) a release of a hazardous substance whose amount equals or exceeds the assigned RQ. The following hazardous substances are contained in this product: None

**SARA Title III (Superfund Amendments and Reauthorization Act):** This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

**311/312 Hazard Categories:** Immediate (Acute) Health Hazard.

**313 Reportable Ingredients:** This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: None

**State Regulations:** California Proposition 65. The chemical(s) noted below and contained in this product are known to the state of California to cause cancer, birth defects or other reproductive harm. Unless otherwise specified in Section 2 of this MSDS, these chemicals are present at <0.1%: There are no proposition 65 chemicals known to exist in this product.

**International Regulations:**

**SECTION XVI - OTHER INFORMATION**

**Other Information:**

**Preparation Information:**

**Disclaimer:** This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of Name. Name assumes no legal responsibility for use of or reliance upon the information in this MSDS.