Material Safety Data Sheet

SECTION 1 – PRODUCT NAME & MANUFACTURER INFORMATION

**PRODUCT NAME**
Foam & Fill Minimal & Triple Expanding Polyurethane Foams – Aerosol Cans

**MANUFACTURER’S NAME & TELEPHONE NUMBER**
Red Devil, Inc.

**STREET ADDRESS**
4175 Webb Street

**CITY / STATE / ZIP**
Pryor, Oklahoma 74361

SECTION 2 – COMPOSITION / HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>PRODUCT CONSISTS OF:</th>
<th>%</th>
<th>LD50</th>
<th>LC50</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquefied Petroleum Gas Blend (mixture)</td>
<td>10 to 30</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>4,4 – Diphenylmethane Diisocyanate (MDI) (101-68-8)</td>
<td>5 to 10</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Higher Oligomers of MDI (Polymeric MDI) (9016-87-9)</td>
<td>5 to 10</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Urethane Pre-polymer Blend (Non-Hazardous Proprietary Blend) (mixture)</td>
<td>60 to 100</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Non-hazardous ingredients*</td>
<td>60 to 100</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*Unlisted ingredients are not considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Calculated VOC: < 20%/wt. CARB Compliance: Exempt. Prop 65 Ingredients: None.

SECTION 3 – HAZARDS IDENTIFICATION

**PRIMARY ROUTE(S) OF ENTRY**
- Skin Contact
- Skin Absorption
- Eye Contact
- Inhalation
- Ingestion

**EMERGENCY OVERVIEW**
Physical Hazards: Danger! Extremely flammable. Foam has strong adhesive-like characteristics & will adhere aggressively to skin & other surfaces. Primary adverse health effects are related to Polymeric Isocyanate (MDI) & to a lesser degree, the Liquefied Petroleum Gas.

**EFFECTS OF OVEREXPOSURE**
- Inhalation: May irritate mucous membranes. Extensive overexposure can lead to respiratory symptoms such as pulmonary edema. Overexposure to liquefied petroleum gas may cause lightheadedness or headaches. Eyes: May be irritating to eyes. Contact can cause physical damage. Skin: May cause irritation, redness & swelling. Prolonged or repeated exposure may result in sensitization. Ingestion: May cause irritation of mucous membranes in mouth & digestive tract.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**
None known.

SECTION 4 – FIRST AID MEASURES

**SKIN CONTACT**
Use rag to remove excess foam. Remove contaminated clothing. Use of a solvent such as Acetone or Mineral Spirits may help remove uncured foam from clothing & other surfaces (avoid eye contact). Cured foam may be physically removed by persistent washing w/ soap & water. If irritation develops, use mild skin cream. If irritation persists, seek medical attention.

**EYE CONTACT**
Flush w/ clean water for @ least 15 minutes & seek medical attention.

**INHALATION**
If breathing difficulty experienced, move to fresh air. If necessary, provide oxygen or artificial respiration by trained personnel & seek medical attention.

**INGESTION**
Drink 1 to 3 glasses of water & seek medical attention. Never give anything orally to an unconscious person.
SECTION 5 – FIRE FIGHTING MEASURES

**FLAMMABLE**

- Yes [x]  
- No [ ]

**EXTINGUISHING MEDIA**

Dry chemical, carbon dioxide, Halon 1211, chemical foam or water spray. Water contamination will produce carbon dioxide.

**FLASHPOINT (°F) & METHOD**

- 156°F, estimated based on liquefied petroleum gas

**UPPER EXPLOSIVE LIMIT (% BY VOLUME)**

- NE

**LOWER EXPLOSIVE LIMIT (% BY VOLUME)**

- NE

**AUTORIZATION TEMPERATURE (°F)**

- NE

**UNUSUAL FIRE & EXPLOSION HAZARDS**

High temperature will raise pressure in containers, which may lead to rupturing. Contents could be sensitive to mechanical impact or static discharge. Vapors released during & immediately after dispensing may ignite explosively if proper ventilation is not employed.

**SPECIAL FIREFIGHTING PROCEDURES**

Cured foam is organic & therefore will burn in the presence of sufficient heat, oxygen & an ignition source. Hazards associated w/ burning foam are similar to burning of other organic materials (wood, paper, cotton, etc) & precautions against exposure should be taken accordingly.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

**PROCEDURES**

PPE should include impervious gloves, protective eye wear & suitable protective clothing. Uncured foam is very sticky; carefully remove by scraping up, then immediately remove residue w/ a rag & solvent such as polyurethane cleaner, mineral spirits or acetone (nail polish remover). Once cured, product can only be removed physically by scraping, buffing, etc.

SECTION 7 – HANDLING & STORAGE

**HANDLING PROCEDURES & EQUIPMENT**

Protect containers from physical abuse.

**STORAGE REQUIREMENTS**

Store in a cool, dry place. Ideal storage temperature is 60 to 80°F. Storage above 90°F will shorten shelf life. Storage below 55°F may affect foam quality if not warmed before using. Protect from freezing.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

**RESPIRATORY**

Provide adequate ventilation. If vapor levels are expected to exceed guidelines, use NIOSH approved positive pressure supplied air respirator.

**EYEWEAR**

Protective eye wear.

**CLOTHING / GLOVES**

Impervious gloves & suitable work clothes.

**HYGIENIC PRACTICES**

Exercise good personal hygiene, wash thoroughly after each use.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE**

Viscous liquid – foams w/ application

**ODOR & APPEARANCE**

Slight hydrocarbon odor during application/curing.

**SPECIFIC GRAVITY**

Approximately 1.1

**VAPOR DENSITY (AIR=1)**

- NE

**EVAPORATION RATE**

- NA

**BOILING RANGE (°F)**

- NE

**pH**

- NE

**SOLUBILITY IN WATER**

Insoluble; reacts slowly w/ water during cure, liberating traces of CO2.

**VAPOR PRESSURE (MM Hg)**

In can > 50 psig/345 kPa; after release from can vapor pressure very low.

**% WT VOLATILE (TNV)**

- NE

SECTION 10 – STABILITY AND REACTIVITY

**STABILITY**

- Yes [x]  
- No [ ]

Stable w/ storage & handling as directed.

**INCOMPATABILITY**

- Yes [x]  
- No [ ]

Alcohols, strong bases or amines & metal compounds (small particle metal catalysts).

**CONDITIONS TO AVOID**

Temperatures above 120°F.

**HAZARDOUS POLYMIZATION/HAZARDOUS DECOMPOSITION PRODUCTS**

Toxic decomposition by-products: CO, CO2, NO & HCN.
SECTION 11 – TOXICOLOGICAL INFORMATION / CARCINOGENICITY

ACGIH  
Not listed as a carcinogen.

OSHA  
Not listed as a carcinogen.

IARC  
Not listed as a carcinogen.

NTP  
Not listed as a carcinogen.

DATA WITH POSSIBLE RELEVANCE TO HUMANS  
NE

SECTION 12 – ECOLOGICAL INFORMATION

AQUATIC TOXICITY  
NE

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL  
Dispose of plastic waste (foam plastic) in accordance w/ Local, State & Federal requirements. Before disposing of containers, relieve remaining foam & pressure. Allow product to fully cure before disposing. Never discard in a liquid state.

SECTION 14 – TRANSPORT INFORMATION

SPECIAL SHIPPING INFORMATION  

SECTION 15 – REGULATORY INFORMATION

CERCLA – SARA HAZARD CATEGORY  
SARA Title III: Diphenylmethane Diisocyanate (101-68-8)  
See Section 16.

SARA 313  
NE  
TSCA & DSL  
All ingredients listed on TSCA Inventory as well as Canadian Domestic Substances List.

SECTION 16 – OTHER INFORMATION / SPECIAL PRECAUTIONS / LEGEND

NFPA: Fire: 2, Health: 2, Reactivity: 1. HMIS: Flammability: 2, Health: 2, Reactivity: 1. Product is a liquid urethane prepolymer mixture that is packaged under pressure (Flammable Compressed Gas). Containers should not be heated above 120F, to avoid excessive pressure build-up. None of the compounds in this product are listed by IARC, NTP, OSHA or ACGIH as a carcinogen. Prop. 65: Based on information currently available, product is not known to contain detectable amounts of any chemicals currently listed under California Proposition 65. ECCN Number: EAR99.


Reviewed By  
Larry Brandon  
NAME  
VP Technology & GM  
TITLE  
January 26, 2010  
DATE