

Material Safety Data Sheet

0915 Fire Block Expanding Polyurethane Foam

MSDS No. 0122FBF

Emergency Phone No.
800- 535-5053 - INFOTRAC

SECTION 1 – PRODUCT NAME & MANUFACTURER INFORMATION

PRODUCT NAME	Fire Block Expanding Polyurethane Foam – 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

	%	LD50	LC50	UNITS
Methylenediphenyl diisocyanate isomers (Polymeric MDI) (9016-87-9)	< 30	NA	NA	
4,4' – methylenediphenyl diisocyanate (MDI) (101-68-8)	< 30	NA	NA	
Dimethyl ether (115-10-6)	< 15	NA	NA	
Propane (74-98-6)	0 to 20	NA	NA	
Butane (106-97-8)	0 to 20	NA	NA	
Isobutane (75-28-5)	0 to 20	NA	NA	
Urethane Pre-polymer Blend (CAS No. not available) (Non-Haz proprietary polyol blend)	25 to 50	NA	NA	

*Unlisted Ingrid. not considered hazardous under OSHA Haz. Com. Std. (29 CFR 1910.1200).
Calculated VOC Content: ~ 170 g/L. CARB Compliance: Exempt. Prop 65 Ingrid: No.

SECTION 3 – HAZARDS IDENTIFICATION

PRIMARY ROUTE(S) OF ENTRY	<input checked="" type="checkbox"/> Skin Contact <input type="checkbox"/> Skin Absorption <input checked="" type="checkbox"/> Eye Contact <input checked="" type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Ingestion
EMERGENCY OVERVIEW	DANGER! Extremely flammable aerosol. Harmful by inhalation, in contact w/ skin or when swallowed. Irritating to eyes & skin. Prolonged exposure may result in chronic effects. May result in sensitization w/ skin contact.
EFFECTS OF OVEREXPOSURE	<u>Inhalation</u> : Vapors may irritate mucus membranes w/ tightness in chest, coughing, wheeziness or allergic asthma-like sensitivity. Overexposure to gases may result in light headedness, headaches or lethargy. <u>Skin Contact</u> : May cause localized skin irritation, redness. <u>Eye Contact</u> : Causes eye irritation. For its adhesive feature, foam contact w/ eyes may result in physical damage due to adhesive properties. <u>Ingestion</u> : Harmful if swallowed.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE	None known.

SECTION 4 – FIRST AID MEASURES

SKIN CONTACT	Use rag to remove excess foam. Remove contaminated clothing. Remove uncured foam from skin using a delicate solvent such as acetone or mineral spirits (avoid eye contact). Hardened foam may be removed by persistent washing w/ soap & water. If irritation develops, use a delicate cream. Seek medical attention. Wash clothing separately prior to reuse.
EYE CONTACT	Flush w/ clean water for @ least 15 minutes. Remove contact lenses if easy to do. Seek medical attention.
INHALATION	Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled material. Induce artificial respiration w/ aid of a pocket mask equipped w/ a one-way valve or other proper respiratory medical device. Seek medical attention.
INGESTION	Rinse mouth. Do not induce vomiting unless advised by medical personnel & do not use mouth-to-mouth if victim ingested material. Induce artificial respiration w/ aid of a pocket mask equipped w/ a one-way valve or other proper respiratory medical device. If swallowed, seek medical attention & show MSDS or label.

SECTION 5 – FIRE FIGHTING MEASURES

FLAMMABLE	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Extremely flammable aerosol.	
EXTINGUISHING MEDIA	Large fires: Dry chemical, foam or water spray. Small fires: CO2, dry chemical or water spray.		
FLASHPOINT (°F) & METHOD	~ 32F (0C) - propellant	UPPER EXPLOSIVE LIMIT (% BY VOLUME)	11.0 Vol. %
LOWER EXPLOSIVE LIMIT (% BY VOLUME)	1.5 Vol. %	AUTOIGNITION TEMPERATURE (°F)	NE
UNUSUAL FIRE & EXPLOSION HAZARDS	In event of fire, cool tanks w/ water spray. Move containers from fire area if can be done w/o risk. Self-contained breathing apparatus & full protective clothing must be worn.		
SPECIAL FIREFIGHTING PROCEDURES	Hardened foam is an organic matter & will burn in the presence of sufficient heat, oxygen & ignition source.		

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PROCEDURES	Eliminate ignition sources. Local authorities should be advised if significant spillage cannot be contained. Ensure adequate ventilation. Keep individuals away from & upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces prior to entering & keep out of low areas. Do not contaminate water.
-------------------	---

SECTION 7 – HANDLING & STORAGE

HANDLING PROCEDURES & EQUIPMENT	Keep away from heat, spark, open flame & other ignition sources. Protect containers from physical abuse.
STORAGE REQUIREMENTS	Store in a cool, dry place. Ideal storage temperature is 40 to 78F. Storage above 104F will shorten shelf life. Protect from freezing. Protect from heat. Contents under pressure; do not puncture.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

RESPIRATORY	Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release. When workers are facing concentrations above the exposure limit they should use appropriate certified respirators. <u>Engineering Measures</u> : Ensure adequate ventilation, especially in confined areas. Ventilation rates should be matched to conditions.
EYEWEAR	Protective eye wear; safety glasses as a minimum.
CLOTHING / GLOVES	Impervious gloves & suitable work clothes; suitable protective clothing & protective gloves.
HYGENIC PRACTICES	Exercise good personal hygiene, wash thoroughly after each use. When using product, do not eat, drink or smoke. Avoid contact w/ eyes & skin.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Aerosol – rapidly curing foam dispensed by gaseous propellant from aerosol container.	ODOR & APPEARANCE	Characteristic odor; Color: Shade of orange
SPECIFIC GRAVITY	NE	VAPOR DENSITY (AIR=1)	NE
EVAPORATION RATE	NA	BOILING RANGE (°F)	NE
pH	NE	SOLUBILITY IN WATER	Insoluble; reacts w/ water.
VAPOR PRESSURE (MM Hg)	NE	%/WT VOLATILE (TNV)	NE

SECTION 10 – STABILITY AND REACTIVITY

STABILITY	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Stable w/ storage & handling as directed. Stable in normal conditions.
INCOMPATIBILITY	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Incompatible w/ oxidizers, acids, bases, amines, water, aluminum, copper, alcohols & metal compounds.
CONDITIONS TO AVOID	Avoid storage in temperatures exceeding 104F (40C). Protect against mechanical shocks. Avoid heat & moisture.	
HAZARDOUS POLYMERIZATION/HAZARDOUS DECOMPOSITION PRODUCTS	Following application, polymerization occurs. No hazardous decomposition products known.	

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	<u>Ecotoxicity/Environmental Effects</u> : May cause long-term adverse effects in the environment. Not biodegradable.
------------------	---

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL EPA WASTE CODE IF DISCARDED (40CFR Sec.261)	This material & its container must be disposed of as hazardous waste. Must be incinerated in suitable incineration plant holding a permit delivered by competent authorities. Do not dispose of waste into sewer. Do not allow material to drain into water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA it is the responsibility of the user of the product to determine, @ time of disposal, whether product meets RCRA criteria for hazardous waste.
---	---

SECTION 14 – TRANSPORT INFORMATION

SPECIAL SHIPPING INFORMATION	<u>DOT UN No.</u> : UN1950. <u>Proper Shipping Name</u> : Aerosols. <u>Haz. Class</u> : 2.1. <u>Subsidiary Haz. Class</u> : 6.1. <u>Labels Required</u> : 2.2, 6.1. <u>Special Provisions</u> : 153. <u>Packaging Exemptions</u> : 306. <u>Packaging Non-bulk</u> : None. <u>Packaging Bulk</u> : None. <u>ERG No.</u> : 126. <u>IATA No.</u> : UN Number: 1950. <u>Proper Shipping Name</u> : Aerosols, flammable. <u>Haz. Class</u> : 2.1. <u>ERG Code</u> : 10L. <u>IMDG UN No.</u> : 1950. <u>Proper Shipping Name</u> : Aerosols, flammable. <u>Haz. Class</u> : 2.1. <u>TDG Proper Shipping Name</u> : Aerosols, flammable. <u>Haz. Class</u> : 2.1. <u>UN No</u> : N1950. <u>Marine Pollutant</u> : No. <u>Special Provisions</u> : 80 SOR/2002-306.
------------------------------	---

SECTION 15 – REGULATORY INFORMATION

CERCLA – SARA HAZARD CATEGORY; 40 CFR 302.4 (lbs)	Polymethylene polyphenyl isocyanate: 5,000, Butane: 100, Diphenylmethane-4,4'- diisocyanate: 5,000, Dimethylether: 100, Isobutane: 100, Propane: 100. Sec. 302 (Extremely Haz.): No. Sec. 311/312: No.	U.S. STATE REGS	See Section 16.
SARA 313 Title III	Toxic Chemical: De minimis concentration: CAS 101-68-8: 1%. CAS 9016-87-9: 1%.	TSCA & DSL	All ingredients listed on TSCA Inventory as well as Canadian Domestic Substances List: 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

SECTION 16 – OTHER INFORMATION / SPECIAL PRECAUTIONS / LEGEND

NFPA: Fire: 4, Health: 2, Instability: 1. HMIS: Flammability: 4, Health: 2, Physical Haz.: 1. Product is a liquid urethane prepolymer mixture that is packaged under pressure (Flammable Compressed Gas). Containers should be protected from heat, to avoid excessive pressure build-up. 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. US Federal Regs: THIS PRODUCT IS A HAZARDOUS CHEMICAL AS DEFINED BY OSHA HAZARD COMMUNICATION STD 29 CFR 1910.1200. US CAA Section 112 HAPS List: MDI (CAS 101-68-8), MDI (CAS 9016-87-9), WHMIS Status: Controlled. INTERNATIONAL EMERGENCY NUMBER: 352-323-3500 – INFOTRAC.

LEGEND: NA – Not Applicable, NE – Not Established, UN – Unavailable, VOC – Volatile Organic Compound, PEL – Permissible Exposure Limit, TLV – Threshold Limit Value, STEL – Short Term Exposure Limit, MSDS – Material Safety Data Sheet, ACGIH – American Conference of Governmental Industrial Hygienists, SARA – Superfund Amendments & Reauthorization Act of 1986, OSHA – Occupational Safety & Health Administration, HMIS – Hazardous Materials Identification System, NTP – National Toxicology Program, CEIL – Ceiling Exposure Limit, CASRN (CAS Number) – Chemical Abstracts Service Registry Number, TSCA – Toxic Substances Control Act, ECCN Number – Export Control Classification Number.

Reviewed By Larry Brandon VP Technology & GM April 9, 2013

The information contained herein has been developed based upon currently available scientific data. New information may be developed from time to time which may render the conclusions of this report obsolete. Therefore, no warranty is extended as to the applicability of this information to the user's intended purpose or for the consequences of its use or misuse.