

Thank you for requesting an MSDS for this product.

We have reviewed our products, conducted a hazard determination, and prepared MSDSs in compliance with the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS). Our MSDSs also provide information on any toxic chemical subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

If this product, or any component of it, is considered to be hazardous or carcinogenic under the OSHA Hazard Communication Standard or the WHMIS regulations, information is provided in Section 2: COMPOSITION/INFORMATION ON INGREDIENTS or in Section 3: HAZARDS IDENTIFICATION.

## MATERIAL SAFETY DATA SHEET

---

REVISION DATE: 06-15-2009

SUPERSEDES:

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

---

#### COMPANY INFORMATION

H.B. Fuller Company  
1200 Willow Lake Boulevard  
Vadnais Heights, MN 55110  
Phone: 888-423-8553

Medical Emergency Phone Number (24 Hours): 1-888-853-1758  
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

#### PRODUCT INFORMATION

PRODUCT NUMBER: D811W  
PRODUCT DESCRIPTION: Solvent adhesive  
PRODUCT IDENTIFIER: 827557PM

### SECTION 2: HAZARDS IDENTIFICATION

---

#### EMERGENCY OVERVIEW

PHYSICAL STATE: Liquid  
COLOR: Amber  
ODOR: Solvent

Extremely flammable.  
Severe eye irritant.  
Causes skin irritation. May cause allergic skin reaction.  
Moderate respiratory tract irritant.  
Harmful if swallowed.

#### POTENTIAL HEALTH EFFECTS BY ROUTE OF ENTRY

**EYE:** Can cause severe irritation. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excessive blinking and tear production, with marked redness and swelling of the conjunctiva. Temporary vision impairment (cloudy or blurred vision) is possible.

**SKIN:** Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. May cause sensitization.

Component(s) may be absorbed through intact skin, but it is unlikely that harmful effects will occur unless contact is prolonged, repeated, and extensive.

**INHALATION:** Can cause moderate respiratory irritation.

Inhalation of vapors may cause loss of feeling and weakness in the hands and feet and loss of manual dexterity. Inhalation of high concentrations may result in central nervous system (CNS) effects such as dizziness, weakness, fatigue, nausea, headache, and lack of coordination.

**INGESTION:** Ingestion is not an anticipated route of exposure. Harmful if swallowed. Severely irritating to mouth, throat, and stomach.

#### LONG-TERM (CHRONIC) HEALTH EFFECTS

**REPRODUCTIVE:** Contains a substance that is a possible reproductive hazard based on animal studies at doses that could be encountered in the workplace.

**TARGET ORGAN(S):** Central nervous system Peripheral nervous system Reproductive system Liver  
Skin

#### REGULATED CARCINOGEN STATUS:

Unless noted below, this product does not contain regulated levels of NTP, IARC, ACGIH, or OSHA listed carcinogens.

**EXISTING HEALTH CONDITIONS AFFECTED BY EXPOSURE:** Liver disease; Skin disease including eczema and sensitization

## MATERIAL SAFETY DATA SHEET

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT
Hexane, n	110-54-3	30 - 50
Acetone	67-64-1	10 - 30
Toluene	108-88-3	10 - 30
Methyl ethyl ketone	78-93-3	5 - 10
Methylcyclopentane	96-37-7	5 - 10
Epoxy resin	25085-99-8	1 - 5
Heptane	142-82-5	1 - 5

Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

### SECTION 4: FIRST AID MEASURES

**IF IN EYES:** Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.

**IF ON SKIN:** Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

**IF VAPORS INHALED:** Remove to fresh air. Restore breathing, if necessary. Call a physician if symptoms persist.

**IF SWALLOWED:** Severely irritating. Do not induce vomiting. Seek medical attention immediately. Drink 2 glasses of water or milk to dilute. Do not give anything by mouth to an unconscious person. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal.

### SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT:	-18C; 0F TCC
AUTOIGNITION TEMPERATURE:	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
UPPER EXPLOSIVE LIMIT (% in air):	Not established
EXTINGUISHING MEDIA:	Use water spray, foam, dry chemical or carbon dioxide.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Vapors are heavier than air and can travel to a source of ignition and flash back.
SPECIAL FIRE FIGHTING INSTRUCTIONS:	Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide, Carbon monoxide Nitrogen containing gases

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**SPECIAL PROTECTION:** Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, and the area in which the spill occurred. Never exceed any occupational exposure limits. Evaporation of volatile substances can lead to the displacement of air

### MATERIAL SAFETY DATA SHEET

**CLEAN-UP:** creating an environment that can cause asphyxiation.  
Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal. Keep spilled product out of sewers, watersheds, or water systems.  
Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

#### SECTION 7: HANDLING AND STORAGE

**Handling:** Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area.  
Keep away from heat, sparks and flame.  
Wash thoroughly after handling.  
Keep container closed.  
Emptied container retains vapor and product residue.  
Observe all labeled precautions until container is cleaned.  
Drums of this material should be grounded when pouring.  
**DO NOT CUT OR WELD ON OR NEAR THIS CONTAINER.**

**Storage:** Store in a cool, dry, ventilated location. Keep away from heat, sparks, flame and other sources of ignition. Keep container closed.

Consult the Technical Data Sheet for specific storage instructions.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**EYE PROTECTION:** Wear safety glasses with side shields when handling this product.  
Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.

**SKIN PROTECTION:** Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be appropriate if splashing can occur.  
Skin absorption may potentially contribute to the overall exposure to this material. Appropriate measures should be taken to prevent absorption so that the TLV is not invalidated.

**GLOVES:** Butyl rubber

**RESPIRATORY PROTECTION:** Respiratory protection may be required to avoid overexposure when handling this product. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. NIOSH approved air purifying respirator with organic vapor cartridge.  
Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

**VENTILATION:** Use local exhaust ventilation or other engineering controls to minimize exposures.

#### EXPOSURE LIMITS:

Chemical Name	ACGIH EXPOSURE LIMITS	OSHA PEL
Hexane, n	50 ppm TWA  Skin absorption may potentially contribute to the overall exposure to this material.	500 ppm TWA; 1800 mg/m3 TWA
Acetone	500 ppm TWA 750 ppm STEL	1000 ppm TWA; 2400 mg/m3 TWA

**MATERIAL SAFETY DATA SHEET**

Toluene	20 ppm TWA	200 ppm TWA 300 ppm Ceiling
Methyl ethyl ketone	200 ppm TWA 300 ppm STEL	200 ppm TWA; 590 mg/m3 TWA
Methylcyclopentane	Not established	Not established
Epoxy resin	Not established	Not established
Heptane	400 ppm TWA 500 ppm STEL	500 ppm TWA; 2000 mg/m3 TWA

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE:	Liquid
COLOR:	Amber
ODOR:	Solvent
ODOR THRESHOLD:	Not established
WEIGHT PER GALLON (lbs.):	6.4
SPECIFIC GRAVITY:	0.77
SOLIDS (% by weight):	17.0
pH:	Not established
FLASH POINT:	-18C; 0F TCC
BOILING POINT (deg. C):	Not established
FREEZING/MELTING POINT (deg. C):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
EVAPORATION RATE:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
VOC, weight percent	Not determined
VOC, EPA Method 24 (theoretically determined)	475g/liter of material
VOC, EPA Method 24, less water and exempt solvents (theoretically determined)	595 g/liter of material

**SECTION 10: STABILITY AND REACTIVITY**

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Strong oxidizing agents
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide Nitrogen containing gases

**SECTION 11: TOXICOLOGICAL INFORMATION**

COMPONENT	LD50/LC50
Hexane, n	Oral LD50 Rat = 28710 mg/kg Inhalation LC50 Rat = 48000 ppm/4H
Acetone	Oral LD50 Rat = 5800 mg/kg

**MATERIAL SAFETY DATA SHEET**

	Inhalation LC50 Rat = 100200 mg/cu m/4H
Toluene	Oral LD50 Rat = 636 mg/kg Inhalation LC50 Rat = 49000 mg/cu m/4H Dermal LD50 Rabbit = 14.1 ml/kg
Methyl ethyl ketone	Oral LD50 Rat = 2737 mg/kg Inhalation LC50 Rat = 47000 mg/cu m/4H Dermal LD50 Rabbit = 6480 mg/kg
Methylcyclopentane	Not established
Epoxy resin	Not established
Heptane	Oral LD50 Mouse = 5000 mg/kg Inhalation LC50 Rat = 103000 mg/cu m/4H Dermal LD50 Rabbit = 3000 mg/kg

TOXICOLOGY SUMMARY: No additional health information available.

**SECTION 12: ECOLOGICAL INFORMATION**

OVERVIEW: No ecological information available

**SECTION 13: DISPOSAL CONSIDERATIONS**

This product meets the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. It is ignitable waste class D001. Disposal via incineration is recommended. Consult your state, local, or provincial authorities for more restrictive requirements.

LAND DISPOSAL RESTRICTIONS: Acetone Toluene Methyl ethyl ketone

**SECTION 14: TRANSPORTATION INFORMATION**

Consult Bill of Lading for transportation information.

DOT: UN1133, ADHESIVES, 3, II

IATA: UN1133, ADHESIVES, 3, II

**SECTION 15: REGULATORY INFORMATION**

**INVENTORY STATUS**

U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.

CANADIAN CEPA DSL: The components of this product are included on the DSL or are exempt from DSL requirements.

EUROPEAN EINECS: As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at 651-236-5858 (USA) or 450-655-1306 x227 (Canada) to request an export review.

**FEDERAL REPORTING**

**EPA SARA Title III Section 313**

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
n-Hexane	110-54-3	30 - 50
Toluene	108-88-3	10 - 30

## MATERIAL SAFETY DATA SHEET

---

WHMIS STATUS: Unless listed below, this product is not controlled under the Canadian Workplace Hazardous Materials Information System.

B2

D2B D2A

### STATE REPORTING

This MSDS is not prepared for distribution in California.

### SECTION 16: ADDITIONAL INFORMATION

---

This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 3 FLAMMABILITY -- 3 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to the H.B. Fuller Company from its suppliers, and because the H.B. Fuller Company has no control over the conditions of handling and use, the H.B. Fuller Company makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and the H.B. Fuller Company assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Company products to comply with all applicable federal, state and local laws and regulations.