

## Material Safety Data Sheet

### Section 1 – Product Name and Manufacturer

Product Name: GSP 1603-5 Part A  
 Product Use: Component of Polyurethane  
 Effective Date: 8/3/06

Manufactured by:  
 G.S. Polymers, Inc.  
 195 Arovista Ave.  
 Brea, CA 92821  
 (714) 672-0567 Fax: (714) 672-0987

In an emergency, call CHEMTREC @ 800-424-9300

### Section 2 – Hazardous Ingredients

CAS NO.	Hazardous Ingredients(s)	%(by wt.)	ACGIH TLV
	Prepolymer reaction products of MDI	20-30%	
101-68-8	4,4-Diphenylmethane Diisocyanate (MDI)	55-65%	0.005 PPM TWA
25686-28-6	Diphenylmethane Diisocyanate (MDI) Homopolymer	15-25%	Not Established
26447-40-5	Diphenylmethane Diisocyanate (2,2,2,4)	< 2%	Not Established

### Section 3 – Hazards Identification

#### Acute Health Hazards

- Inhalation:** Diisocyanate vapors or mist concentration above the TLV or PEL, can irritate the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV or PEL with similar symptoms as well as asthma attack or asthma-like symptoms. Effect may be delayed several hours. These effects are usually reversible.
- Skin:** Causes irritation with symptoms of reddening, itching, and swelling. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling and rash. Cured material is difficult to remove. Contact with MDI can cause discoloration.
- Eye:** Causes irritation with symptoms of reddening, tearing, stinging, and swelling. May cause temporary corneal injury. Vapor or aerosol may cause irritation with symptoms of burning and tearing.
- Ingestion:** May cause irritation; Symptoms may include abdominal pain, nausea, vomiting, and diarrhea.

#### Chronic Health Hazards

- Inhalation:** As a result of previous repeated overexposures or a single large dose, certain individuals may develop sensitization to diisocyanates (asthma or asthma-like symptoms) that may cause them to react to a later exposure to diisocyanates at levels well below the TLV or PEL. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be immediate or

delayed up to several hours after exposure. Extreme asthmatic reactions can be life threatening. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Sensitization can be permanent. Chronic overexposure to diisocyanates has also been reported to cause lung damage (including fibrosis, decrease in lung function that may be permanent.

**Skin:** Prolonged contact can cause reddening, swelling, rash, and , in some cases, skin sensitization. Animal tests on MDI indicate skin contact alone may lead to an allergic respiratory reaction.

**Eye:** Prolonged exposure may cause conjunctivitis.

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#### Section 4 – First Aid Measures

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<b>Inhalation</b>	Remove patient from exposure, keep warm and at rest. Obtain medical attention. Administer oxygen or artificial respiration as needed. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reactions can be life threatening.
<b>Skin Contact</b>	Remove contaminated clothing. Wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice. Contaminated clothing should be thoroughly cleaned before reuse. For severe exposures, immediately get under safety shower and begin rinsing.
<b>Eye Contact</b>	Immediately flush eyes with running water for a minimum of 15 minutes. Hold eyelids open during flushing. If irritation persists repeat flushing and obtain medical attention IMMEDIATELY.
<b>Ingestion</b>	Do NOT induce vomiting. Provided the patient is conscious, wash out their mouth with water. Refer person to medical personnel for immediate attention.
<b>Note to Physicians</b>	Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema impairing vision. Skin: This compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. Ingestion: Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of the compound. Inhalation: Treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate.

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#### Section 5 – Fire Fighting Measures

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**Extinguishing Media:** Dry chemical, carbon dioxide (CO<sub>2</sub>), foam, water spray for large fires.

**Fire Fighting Protective Equipment:** Fire fighters should wear NFPA compliant structural firefighting protective equipment, including self-contained breathing apparatus and NFPA compliant helmet, hood, boots and gloves. Avoid contact with product. Decontaminate equipment and protective clothing prior to reuse. During a fire, isocyanate vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Exposure to heated diisocyanates can be extremely dangerous.

**Fire and Explosion Hazards:** Closed container may rupture under heat of fire or when contents are contaminated with water (CO<sub>2</sub> is formed). Keep fire-exposed containers cool with a cool-water spray and reduce the risk of rupture. Apply water from a safe distance as the reaction between water and hot diisocyanate can be vigorous.

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#### Section 6 – Accidental Release Measures

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##### **For major spills call Chemtrec (800-424-9300)**

**Spills, Leaks, or Releases:** Clean up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection. Evacuate the area. Prevent further leakage, spillage or entry into drains. Contain and absorb large spillages onto an inert, non-flammable adsorbent carrier

(such as earth or sand). Shovel into open-top drums or plastic bags for further decontamination, if necessary. Apply lid loosely and allow containers to vent for 72 hours to let carbon dioxide (CO<sub>2</sub>) escape. Wash the spillage area clean with liquid decontaminant. Test atmosphere for MDI vapor. Test surface for contamination. Neutralize small spillages with decontaminant. Remove and dispose of residues. Notify applicable government authorities if release is reportable.

**Decontamination:**

Neutralization solutions:

1. Colorimetric Laboratories Inc. (CLI) decontamination solution.
2. A mixture of 75% water, 20% non-ionic surfactant (e.g. Poly-tergent SL-62, Tergitol TMN-10) and 5 % n-propanol.
3. A mixture of 80% water, 20% non-ionic surfactant (e.g. Poly-tergent SL-62, Tergitol TMN-10).
4. A mixture of 90% water, 3-8% ammonium hydroxide or concentrated ammonia, and 2% liquid detergent.

Use of Decontamination Solution: Apply and allow deactivation material to stand for at least 30 minutes before shoveling into drums. Do not tighten the bungs.

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**Section 7 – Handling and Storage**

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**Storage Temperature:** Ideal storage temperature is 16-30°C (60-86°F).

**Storage Requirements:** If material is stored at temperatures above 86 F, it will generate pressure within the container from carbon dioxide gas. Prior to opening, carefully inspect the container. If the container is bulging, or there are any other indications of pressure within the container, do not open the container. Care should be taken whenever opening container in case of a pressure build up. Slow removal of bung closure or lid should safely remove pressure from a non-bulging drum. Observe safety precautions whenever opening a new container. Do not breathe vapors, mists or dusts. Use adequate ventilation to keep airborne isocyanate levels below the exposure limits. Wear respiratory protection if material is heated, sprayed, used in a confined space, or if the exposure limit is exceeded. Warning properties (irritation of the eyes, nose and throat or odor) are not adequate to prevent overexposure from inhalation. Wash thoroughly after handling. Do not breathe smoke and gases created by overheating or burning this material. Decomposition products can be highly toxic and irritating. Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected.

**Other Information:** Keep stocks of decontaminant (See Section 6) readily available.

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**Section 8 – Exposure Control and Personal Protection**

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**Engineering Controls:** Use local exhaust ventilation to maintain airborne concentrations below the TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it. Follow guidelines in the ACGIH publication "Industrial Ventilation". Monitoring for airborne diisocyanate should become part of the overall employee exposure characterization program. NIOSH, OSHA and others have developed sampling and analytical methods.

**Respiratory Protection:** Airborne MDI concentrations greater than the ACGIH TLV-TWA (TLV) or OSHA PEL-C (PEL) can occur in inadequately ventilated environments when MDI is sprayed, aerosolized, or heated. In such cases, respiratory protection must be worn. The type of respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection standard (29 CFR 1910.134). The type of respiratory protection available includes (1) an atmosphere-supplying respirator such as a self-contained breathing apparatus (SCBA) or a supplied air respirator (SAR) in the positive pressure or continuous flow mode, or (2) an air-purifying respirator (APR). If an APR is selected then (a) the cartridge must be equipped with an end-of-service life indicator (ESLI) certified by NIOSH, or (b) a change out schedule, based on objective information or data that will ensure that the cartridges are changed out before the end of their service life, must be developed and implemented. The basis for the change out schedule must be described in the written respirator program. Further, if an APR is selected, the airborne diisocyanate concentration must be no greater than 10 times the TLV or PEL. The recommended APR cartridge is an organic vapor/particulated filter combination cartridge (OV/P100).

**Eye Protection:** Chemical safety goggles. If there is a potential for splashing, use a full-face shield.

**Skin Protection:** The following protective materials are recommended. Gloves made of neoprene, nitrile-butadiene rubber, butyl rubber. Thin disposable gloves should be avoided for repeated or long term use. Protective clothing should be selected to cover as much of the exposed skin area as possible with appropriate clothing to prevent skin contact.

**Medical Surveillance:** All applicants who are assigned to an isocyanate work area should undergo a pre-placement medical evaluation. A history of exzema or respiratory allergies such a hay fever, are possible reasons for medical exclusion from isocyanate areas. Applicants who have a history of adult asthma should be restricted from work with isocyanates. Applicants with a history of prior isocyanate sensitization should be excluded from further work with isocyanates. A comprehensive annual medical surveillance program should be instituted for all employees who are potentially exposed to diisocyanates. Once a worker has been diagnosed a sensitized to any isocyanate, no futher exposure can be permitted.

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## Section 9 – Chemical and Physical Properties

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<b>Appearance/Color:</b> .....	Clear – Light Yellow Liquid
<b>Odor:</b> .....	Weakly Aromatic
<b>Boiling Point:</b> .....	150 C (302 F)
<b>Melting/Freezing Point:</b> .....	10-15 C (50-59 F)
<b>Flash Point:</b> .....	200 C (392 F) Closed Cup
<b>Solubility in Water:</b> .....	Insoluable - Reacts slowly with Water
<b>Specific Gravity:</b> .....	1.17
<b>Bulk Density:</b> .....	9.81 lbs/gal
<b>% Volatile by Volume:</b> .....	Negligible
<b>Vapor Pressure:</b> .....	< 0.0001 mmHg at 77 F (25 C)

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## Section 10 – Stability and Reactivity

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**Hazardous Reactions:** Exposure to temperatures in excess of 158 F (70 C) may cause dangerous pressure build-up, resulting in the deformation and/or rupture of sealed containers. MDI reacts slowly with water to form CO<sub>2</sub> gas. This gas can cause sealed containers to expand and possibly rupture. Contact with moisture, other materials that react with isocyanates, or temperatures above 350 F (177 C), may cause polymerization.

**Materials to Avoid:** Water, Amines, Strong bases, Alcohols, copper alloys, Aluminum

**Hazardous Decomposition Products:** By first and high heat: hydrogen cyanide; carbon dioxide (CO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>), dense black smoke, isocyanate, isocyanic acid, other undetermined compounds

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## Section 11 – Toxicological Information

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This product has not been tested as a whole. Information for components from available sources is listed below.

### Toxicity data Polymeric MDI

Oral LD<sub>50</sub>: > 2,000 mg/kg (rat, Male/Female)

Dermal LD<sub>50</sub>: No Data

Inhalation LC<sub>50</sub> (rat): 490 mg/m<sup>3</sup> vapor, 4 h

Skin Irritation: rabbit, slightly irritating

Repeated Dose Toxicity:

90 days, inhalation: NOAEL: 1 mg/m<sup>3</sup>, (rat, Male/Female, 6 hrs/day 5 days/week)

Irritation to lungs and nasal cavity.

2 years, inhalation: NOAEL: 0.2 mg/m<sup>3</sup>, (rat, Male/Female, 6 hrs/day 5 days/week)

Irritation to lung and nasal cavity.

Mutagenicity: Genetic Toxicity in Vitro: Bacterial – gene mutation assay: negative

Carcinogenicity: rat, Male/Female, inhalation, 2 years. 6 hrs.day, 5 days/week  
Exposure to a level of 6mg/m<sup>3</sup> polymeric MDI was related to the occurrence of lung tumors. This level is significantly over the TLV for MDI.

**Developmental Toxicity/Teratogenicity**

rat, female, inhalation, gestation days 6-15, 6 hrs/day, NOAEL (teratogenicity): 12 mg/m<sup>3</sup>, NOAEL (maternal): 4mg/m<sup>3</sup>  
No teratogenic effects observed at doses tested, Fetotoxicity seen only with maternal toxicity.

**Toxicity data for 4,4'-Diphenylmethane Diisocyanate (MDI)**

Oral LD50: No Data

Dermal LD50 (rabbit): > 10,000 mg/kg

Inhalation LC50 (rat): > 2240 mg/m<sup>3</sup> aerosol, 1 h

Skin Irritation: rabbit, slightly irritating

Eye Irritation: rabbit, slightly irritating

**Sensitization:**

dermal: sensitizer (guinea pig, Maximisation Test (GPMT))

inhalation: sensitizer (guinea pig)

**Repeated Dose Toxicity:**

90 days, inhalation: NOAEL: 1 mg/m<sup>3</sup>, (rat, Male/Female, 6 hrs/day 5 days/week)

Irritation to lungs and nasal cavity.

**Mutagenicity:**

**Genetic Toxicity in Vitro:**

Ames: (Salmonella typhimurium, Metabolic Activation: with/without) Positive and negative results were reported. The use of certain solvents which rapidly hydrolyze diisocyanates is suspected of producing the positive mutagenicity results.

**Genetic Toxicity in Vivo:**

Micronucleus Assay: negative (mouse)

Carcinogenicity: rat, Male/Female, inhalation, 2 years. 17 hrs/day, 5 days/week

negative

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Section 12 – Ecological Information

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This product has not been tested as a whole. Information for components from available sources is listed below.

**Ecological Data for 4,4'-Diphenylmethane Diisocyanate (MDI)**

**Acute and Prolonged Toxicity to Fish**

LC50: > 500mg/l (Zebra fish (Brachydanio rerio), 24 hrs)

**Acute Toxicity to Aquatic Invertebrates**

EC50: > 500 mg/l (Water flea (Daphnia magna), 24 hrs)

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Section 13 – Disposal Considerations

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**Waste Disposal Method:** Waste disposal should be in accordance with existing federal, state and local environment control laws. Incineration is the preferred method.

**Empty Container Precautions:** Empty containers retain product residue; observe all precautions for product. Do not heat or cut empty container with electric or gas torch because highly toxic vapors and gases are formed. Do not reuse without thorough commercial cleaning and reconditioning. If container is to be disposed, ensure all product residues are removed prior to disposal.

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 Section 14 – Transportation Information
 

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**Land Transportation DOT:**

Proper Shipping Name: Other regulated substances, liquid, n.o.s.  
 (contains 4,4'-Diphenylmethane Diisocyanate (MDI))  
 Hazard Class or Division: 9  
 UN/NA Number: NA3082  
 Packaging Group: III  
 Hazard Label(s): Class 9  
  
 Reportable Quantity (RQ): 6250 lbs.  
  
**Sea Transportation:** Not Regulated  
**Air Transportation:** Not Regulated  
**Additional Information:** In individual containers of less than the Product RQ, material ships non-regulated.

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 Section 15 – Regulatory Information
 

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The regulatory information is not intended to be comprehensive. Other regulations may apply to this material. To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency.

**United States Federal Regulations:****OSHA Hazcom Standard Rating:** Hazardous**US Toxic Substances Control Act:** Listed on the TSCA Inventory**US EPA CERCLA Hazardous Substances (40 CFR 302):**

4,4'-Diphenylmethane Diisocyanate (MDI): Reportable Quantity: 5,000 lbs.

**SARA Section 311/312 Hazard Categories:**

Acute Health Hazard, Chronic Health Hazard

**US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None

**US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**

Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required:

4,4'-Diphenylmethane Diisocyanate (MDI)

**US EPA Resource Conservation and Recovery Act (RCRA) composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):**

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic.

However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

**State Right-To-Know Information:**

For details of your regulatory requirement you should contact the appropriate agency in your state.

This product contains trace amounts of phenyl isocyanate (CAS# 103-71-9) and monochlorobenzene (CAS# 108-90-7) as impurities.

**Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:**

CAS NO.	Component(s)	%(by wt.)
101-68-8	4,4--Diphenylmethane Diisocyanate (MDI)	55-65%
25686-28-6	Diphenylmetane Diisocyanate (MDI) Homopolymer	15-25%
26447-40-5	Diphenylmethane Diisocyanate (2,2,2,4)	< 2%



**New Jersey Environmental Hazardous Substances List and/or New Jersey, RTK Special Hazardous Substances Lists:**

CAS NO.	Component(s)	%(by wt.)
101-68-8	4,4--Diphenylmethane Diisocyanate (MDI)	55-65%

**California Prop. 65:** To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

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Section 16 – Other Information

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HMIS RATINGS:	Health	Flammability	Reactivity
	2*	1	1

0=Minimal; 1=Slight; 2=Moderate; 3=Serious; 4=Severe

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of G.S. Polymers' product safety program. It is not intended to constitute performance information concerning the product. No Express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.

To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency. G.S. Polymers does not undertake to furnish advice on such matters.

Company: G.S. Polymers, Inc.

Date Modified: 8/3/06

## Material Safety Data Sheet

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### Section 1 – Product Name and Manufacturer

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Product Name: GSP 1603-5 Part B  
Product Use: Component of Polyurethane  
Effective Date: 8/3/06

Manufactured by:  
G.S. Polymers, Inc.  
195 Arovista Ave.  
Brea, CA 92821  
(714) 672-0567 Fax: (714) 672-0987

In an emergency, call CHEMTREC @ 800-424-9300

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### Section 2 – Information on Ingredients

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CAS NO.	Hazardous Ingredients(s)	%(by wt.)	ACGIH TLV
8001-79-04	Proprietary Polyol	50 - 75%	Not Established
77-58-7	Dibutyltin Dilaurate	< 0.5%	0.2 mg/m3 (STEL)

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### Section 3 – Hazards Identification

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#### Acute Health Hazards

- Inhalation: Single exposure to vapors or mist is not likely to be hazardous.  
Skin: Extended/repeated contact may cause irritation in some individuals.  
Eye: Contact with eyes may cause irritation in some individuals.  
Ingestion: Not expected to be toxic by ingestion.

#### Chronic (Long Term) Health Hazards

None Known

#### Conditions Aggravated By Exposure:

None Known

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### Section 4 – First Aid Measures

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- Inhalation** No specific treatment is necessary since the material is not likely to be hazardous by inhalation. If exposed to excessive levels of vapors or mists, remove to fresh air and get medical attention if cough or other symptoms develop.
- Skin Contact** Wash with soap and water. Get medical attention if irritation develops or persists.

<b>Eye Contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids apart. Get medical attention if irritation or other symptoms occur.
<b>Ingestion</b>	Rinse mouth with water. Never give anything by mouth to an unconscious person. If large quantities of ingested or if symptoms develop, seek medical attention.

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#### Section 5 – Fire Fighting Measures

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**Flash Point:** 540 F (282 C)

**Auto Ignition Temperature:** 840 F

**Extinguishing Media:** CO<sub>2</sub>, dry chemical, alcohol foam, water spray.

**Fire Fighting Procedures:** Evacuate area and fight fire from safe distance. Wear pressure-demand self-contained breathing apparatus (MSHA/NIOSH-approved or equivalent) and full protective gear. As with any fire, toxic gases, vapors, and fumes can be generated. Using water can cause frothing with increasing fire intensity.

**Fire and Explosion Hazards:** None known. Explosion not expected from mechanical impact or static discharge.

**Conditions of Flammability:** Material may burn, but does not ignite readily. Avoid high temperatures.

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#### Section 6 – Accidental Release Measures

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#### **For major spills call Chemtrec (800-424-9300)**

**Spills, Leaks, or Releases:** Minimize entry of material into sewers and drainage systems. Refer to permit discharge limitations if applicable. Isolate spill area, preventing entry by unauthorized persons. Prevent skin/eye contact. Stop leak and contain material. Absorb spill with inert material (e.g., dry sand, earth). Place in an approved chemical waste container.

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#### Section 7 – Handling and Storage

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**Storage:** Store in a cool dry place away from strong oxidizers and acids.

**Handling:** Although this material does not present a significant skin or eye concern, skin eye contact should be avoided as good industrial practice. Wearing of protective gloves and eye protection is recommended. Wash hands and contaminated skin after handling.

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#### Section 8 – Exposure Control and Personal Protection

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**Exposure Levels:** None established.

**Engineering Controls:** Source of fine spray, mist or vapor should be controlled with local exhaust ventilation.

**Respiratory Protection:** Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use a positive pressure air supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respiratory protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

**Eye Protection:** Use safety glasses. If contact with the eyes is likely, use chemical goggles. Use a face shield as needed.

**Skin Protection:** Use impervious gloves. Use clean protective body-covering clothing as needed to minimize contact with clothing and skin.

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#### Section 9 – Chemical and Physical Properties

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**Appearance/Color:** .....Black Viscous Liquid  
**Odor:** ..... Vegetable Oil  
**Boiling Point:** ..... 313 C (595 F)  
**Melting/Freezing Point:** ..... -15 F  
**Solubility in Water:** ..... Insoluble  
**Specific Gravity:** .....1.54  
**Bulk Density:**..... 12.88 lbs/gal

#### Section 10 – Stability and Reactivity

**Stable:** Yes

**Strong Oxidizer:** No

**Hazardous Polymerization:** Not prone to hazardous polymerization

**Incompatibility:** Can react vigorously with oxidizing materials.

**Conditions to Avoid:** Keep from contact with oxidizing materials.

**Hazardous Decomposition Products:** Products of incomplete combustion may include CO, CO<sub>2</sub>, and dense smoke.

#### Section 11 – Toxicological Information

This product has not been tested as a whole. Information for components from available sources is listed below.

##### **Toxicity data on Proprietary Polyol**

Oral LD50: > 5,000 mg/kg (rat, Male/Female)

Eye irritation, rabbit: 500 mg – mild

Skin irritation, rabbit; mild

Skin irritation, human; 48 hour patch test – not irritating

#### Section 12 – Ecological Information

No Data.

#### Section 13 – Disposal Considerations

**Waste Disposal Method:** Waste must be disposed of in accordance with federal, state, and local environmental control regulations. Incineration is the preferred method.

**Empty Container Precautions:** Empty containers must be handled with care due to product residue. Do not heat or cut empty container with electric or gas torch.

#### Section 14 – Transportation Information

**Land Transportation DOT:** Not Regulated in Non-Bulk Packaging

**Sea Transportation:** Not Regulated in Non-Bulk Packaging

**Air Transportation:** Not Regulated in Non-Bulk Packaging

#### Section 15 – Regulatory Information

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material. To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency.

**United States Federal Regulations:****US EPA CERCLA Hazardous Substances (40 CFR 302):**

Residual propylene oxide (typical)

**SARA Section 311/312 Hazard Categories:**

Not Evaluated

**US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

Not Evaluated

**US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**

Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required:

Not Evaluated

**State Right-To-Know Information:**

For details of your regulatory requirement you should contact the appropriate agency in your state.

**Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:**

Not Evaluated

**New Jersey Environmental Hazardous Substances List and/or New Jersey, RTK Special Hazardous Substances Lists:**

Not Evaluated

**California Prop. 65:** This product contains the following chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

None

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**Section 16 – Other Information**

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HMIS Rating:                      Health: 2              Flammability: 1              Reactivity: 0

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To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency. G.S. Polymers does not undertake to furnish advice on such matters.

Company: G.S. Polymers, Inc.

Rev Date: 8/3/06