

# MATERIAL SAFETY DATA SHEET



Date Issued: 01/26/2009  
MSDS No: 440601  
Date Revised: 01/29/2010  
Revision No: 2

## Geobond PUR 50

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Geobond PUR 50

**MANUFACTURER**

Geocel, LLC  
P.O. Box 398  
Elkhart, IN 46515-0398  
**Product Stewardship:** 574-264-0645

**24 HR. EMERGENCY TELEPHONE NUMBERS**

ChemTel - 800-255-3924

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**IMMEDIATE CONCERNS:** Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed. Provide ventilation adequate to control vapor exposure within inhalation guidelines when handling.

This product is irritating to the eyes and skin. Closed containers may rupture when exposed to high temperatures, or when the product has been contaminated with water.

Avoid breathing hot mists and vapors. This product contains a respiratory and skin sensitizer. Causes respiratory tract irritation and may cause allergic respiratory reaction. May cause permanent respiratory damage. Product vapors are potentially irritating to skin. May cause allergic skin reaction and dermatitis.

#### POTENTIAL HEALTH EFFECTS

**EYES:** This product may cause irritation to the eyes. May cause temporary corneal injury.

**SKIN:** Skin contact may cause irritation. Isocyanates may react with skin protein and moisture to cause itching, reddening, swelling, scaling or blistering. Individuals previously sensitized to this material may experience these symptoms from exposure to very small amounts of liquid or vapor.

**INGESTION:** May cause irritation and corrosive action in the mouth, throat and digestive tract. This product can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. Small amounts of this product, if aspirated in to the lungs, may cause mild to severe pulmonary injury.

**INHALATION:** This product may cause irritation to the respiratory system. Use with adequate ventilation. Repeated inhalation may be harmful; lung irritation and serious central nervous system disorders may result. Inhalation of vapors in high concentration can cause narcotic effects and metabolic acidosis.

Single large dose, and/or repeated exposures, may lead to sensitization to diisocyanates or polyisocyanates (asthma or asthma-like symptoms), causing an individual to experience adverse effects at exposure levels well below exposure limits or guidelines. Symptoms may include chest tightness, wheezing, shortness of breath, coughing or asthmatic attack, and may be delayed up to several hours. Extreme asthmatic reactions can be life threatening. Once sensitized, an individual may experience adverse symptoms upon exposure to dust, cold air or other irritants. Sensitization can last several months, years or be permanent in some cases.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** Causes eye irritation.

**SKIN:** Irritation of the skin.

**INGESTION:** Ingestion of this material can cause mouth, throat, esophageal, and gastrointestinal tract irritation.

**INHALATION:** Irritation of upper respiratory tract, asthmatic symptoms, chest tightness, breathing difficulty, coughing, short throat.

**TARGET ORGAN STATEMENT:** The eyes, lungs and skin may be targeted and damaged by components of the product.

**HEALTH HAZARDS:** This product contains Methylene Diphenyl Isocyanate (MDI) which is a potential skin sensitizer and has been shown to alter cells in certain experiments. Although inconclusive, these cellular changes are thought to indicate potential carcinogenicity. Risk to your health depends on duration and concentration of exposure.

**COMMENTS:** Signs and symptoms of overexposure to this product include headache, irritation of upper respiratory tract, asthmatic symptoms, chest tightness, breathing difficulty, coughing, dizziness, weakness, fatigue, eye irritation, skin irritation, diarrhea.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS	EINECS
4-isocyanatosulphonyltoluene	4083-64-1	223-810-8
Gamma-Glycidoxypropyltrimethoxysilane	2530-83-8	
Polymeric Isocyanates	9016-87-9	- -
Tin Compounds, Organic (as Tin) (casrn 77-58-7)	77-58-7	- -
Titanium Dioxide	13463-67-7	236-675-5

#### 4. FIRST AID MEASURES

**EYES:** Immediately flush with plenty of water for at least 15 minutes. Get medical attention or advice.

**SKIN:** Remove contaminated clothing to prevent further skin exposure and dispose of properly. In situations involving considerable skin contact, place the contaminated person in a deluge shower for at least 15 minutes. For minor exposures, wash thoroughly with soap and clean water. Get medical attention if irritation persists.

**INGESTION:** If ingested, get immediate medical attention. Do not induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to a victim who is unconscious or is having convulsions.

**INHALATION:** Remove to fresh air. Get medical attention immediately for a large dose exposure or if cough or other symptoms develop. Administer oxygen or artificial respiration as needed.

**NOTES TO PHYSICIAN:** Treat symptomatically and supportively.

Eyes: Stain for evidence of corneal injury. If cornea is burned, apply antibiotic/steroid preparation as needed.

Skin: This product contains a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn.

Ingestion: Treat symptomatically.

Inhalation: This material contains a known pulmonary sensitizer.

Any individual experiencing dermal or pulmonary sensitization should be removed from exposure to any diisocyanate. This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

#### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** Not Established

**EXTINGUISHING MEDIA:** Dry chemical, foam, carbon dioxide (CO<sub>2</sub>), sand.

**HAZARDOUS COMBUSTION PRODUCTS:** Additional decomposition products include oxides of nitrogen, amines, hydrogen cyanide and isocyanate-containing compounds.

**EXPLOSION HAZARDS:** Not known.

**FIRE FIGHTING EQUIPMENT:** Firefighters should wear full protective clothing including self contained breathing apparatus.

**SENSITIVE TO STATIC DISCHARGE:** Not known.

**SENSITIVITY TO IMPACT:** Not known.

#### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Wearing the personal protective equipment designated in Section 8, carefully contain the spill and transfer to the appropriate container for disposal. Do not discharge to lakes, streams, ponds, or sewers. Dispose of in compliance with local, state, and federal regulations.

**LARGE SPILL:** Wearing the personal protective equipment designated in Section 8, carefully contain the spill and transfer to the appropriate container for disposal. Do not discharge to lakes, streams, ponds, or sewers. Dispose of in compliance with local, state, and federal regulations. Ventilate well while cleanup is in process and until fumes dissipate.

##### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL:** Isolate spill area. Stop discharge if safe to do so. Stop material from entering sewers or water streams. Scrape up polyurethane and deposit into appropriate containers.

**LAND SPILL:** Isolate spill area. Stop discharge if safe to do so. Stop material from contaminating soil. Scrape up polyurethane and deposit into appropriate containers.

#### 7. HANDLING AND STORAGE

**HANDLING:** Wash hands thoroughly after handling, especially before eating, drinking, smoking, and using restroom facilities. Wash contaminated goggles, face shields, and gloves. Professionally launder contaminated clothing before re-use. Do not breathe vapors, mists or dusts. Do not breathe fumes generated when the material is overheated or burned. Use adequate ventilation. Wear respiratory protection if the material is heated, sprayed, used in a confined space or if exposure limit is exceeded. This product can produce asthmatic sensitization. Individuals with lung or breathing problems or prior allergic reactions to isocyanate must avoid fumes from this product. Wear appropriate protective equipment to avoid contact with skin and eyes.

**STORAGE:** Store in a cool, dry, well-ventilated area away from heat, ignition sources and direct sunlight. Water contamination should be avoided. Cool location should be 60-80 degrees F or 15-30 degrees C.

**COMMENTS:** Attention! Follow label warnings even after container is emptied since empty containers may retain product

residues. Do not reuse empty container for food, clothing, or products for human or animal consumption, or where skin contact can occur.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use local exhaust or general ventilation where the potential exists to exceed the PEL or TLV exposure limits.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear safety glasses with side shields or goggles when handling this material.

**SKIN:** Wear appropriate clothing to minimize skin contact with this product.

**RESPIRATORY:** Avoid breathing vapor and/or mists. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. High airborne concentrations may necessitate the use of self-contained breathing apparatus (SCBA) or a supplied air respirator.

**WORK HYGIENIC PRACTICES:** Wash hands thoroughly after each use, especially before eating or smoking. Good personal hygiene practices should always be followed.

**OTHER USE PRECAUTIONS:** Eyewash fountains and emergency showers should be readily available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Paste

**ODOR:** Slight

**COLOR:** Various

**pH:** Not Applicable

**FREEZING POINT:** Not Applicable

**FLASHPOINT AND METHOD:** Not Established

**(VOC):** < 1.000 %

**Notes:** 12 g/l

## 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** Yes

**STABILITY:** This product is stable under normal conditions but will react slightly with water to release some heat and carbon dioxide. The reaction is not violent. Carbon dioxide, carbon monoxide and in high temperature (800 °F) low oxygen atmospheres such as in fire situations, hydrogen cyanide may be released.

**POLYMERIZATION:** Hazardous polymerization can occur with elevated temperatures or contact with water.

**CONDITIONS TO AVOID:** Avoid strong acids. Avoid amines, strong bases, alcohols and metallic hydrides.

## 11. TOXICOLOGICAL INFORMATION

**EYE EFFECTS:** Irritating to the eyes.

**SKIN EFFECTS:** Irritating to the skin.

### CARCINOGENICITY

Chemical Name	IARC Status
Titanium Dioxide	2B

**Notes:** This product contains Methylene Diphenyl Isocyanate (MDI). MDI is not listed by the NTP, IARC or regulated by OSHA as a carcinogen. However, it has been shown to alter cells in certain experiments. Although inconclusive, these cellular changes are thought to indicate potential carcinogenicity.

**REPEATED DOSE EFFECTS:** Single large doses, and/or repeated exposures, may lead to sensitization to diisocyanates or polyisocyanates (asthma or asthma-like symptoms), causing an individual to experience adverse effects at exposure levels well below exposure limits or guidelines. Symptoms may include chest tightness, wheezing, shortness of breath, coughing or asthmatic attack, and may be delayed up to several hours. Extreme asthmatic reactions can be life threatening. Once sensitized, an individual may experience adverse symptoms upon exposure to dust, cold air or other irritants. Sensitization can last several months, years or be permanent in some cases. Chronic exposure may cause lung damage, including fibrosis and decreased lung function, which may be permanent.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** No environmental studies have been carried out on this product.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Part 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

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#### 14. TRANSPORT INFORMATION

##### DOT (DEPARTMENT OF TRANSPORTATION)

**OTHER SHIPPING INFORMATION:** Generators must consult DOT laws and regulations to ensure the product is being transported appropriately.

**COMMENTS:** Not regulated as dangerous goods.

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#### 15. REGULATORY INFORMATION

##### UNITED STATES

##### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** This product poses the following physical and health hazard(s) as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986:

**FIRE:** Yes **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

**313 REPORTABLE INGREDIENTS:** This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR372. CAS #: 101-68-8 MDI, 9016-87-9 Polymeric Isocyanate.

**CALIFORNIA PROPOSITION 65:** This product does not contain any chemicals known to be on California's Proposition 65 List.

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#### 16. OTHER INFORMATION

**APPROVED BY:** Technical Staff

**PREPARED BY:** Technical Staff

**REVISION SUMMARY:** Revision #: 2. This MSDS replaces the October 23, 2009 MSDS.

**NFPA STORAGE CLASSIFICATION:** Health 2, Flammability 2, Physical Hazard 0

**HMIS RATINGS NOTES:** Health 2, Flammability 2, Physical Hazard 0, PPE X