

McGill Airseal LLC
MATERIAL SAFETY DATA SHEET

MSDS Name: UNI-THANE
Revision Date: January 20, 2005
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SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: UNI-THANE
CAS Number: none
Company Identification: McGill Airseal LLC
2400 Fairwood Avenue
Columbus, Ohio 43207
Contact: McGill Airseal LLC
Telephone: (800) 624-5535 (614) 443-5520
Fax: (614) 542-2620
Chemtrec (24 hour): (800) 424-9300
Chemtrec International: (703) 527-3887
Product Class: polyurethane
Product Use: sealant
Product Code: 008812

SECTION 2 – COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Weight Percent
aromatic polyisocyanate	Trade Secret	20.0 – 35.0
tackifier	Trade Secret	15.0 – 25.0
calcium carbonate (limestone)	1317-65-3	10.0 – 20.0
kaolin (clay)	1332-58-7	5.0 – 15.0
aromatic petroleum distillates	64742-95-6	5.0 – 10.0
xylenes (dimethylbenzenes)	1330-20-7	5.0 – 10.0
titanium dioxide	13463-67-7	1.0 – 5.0
thickener	Trade Secret	1.0 – 5.0
1, 2, 4 – trimethyl benzene (pseudocumene)	95-63-6	1.0 – 5.0
aluminum (metal)	7429-90-5	1.0 – 5.0
adhesion promoter	Trade Secret	1.0 – 5.0
ethyl benzene	100-41-4	0.5 – 1.5
crystalline silica (quartz)	14808-60-7	0.05 – 0.50
4, 4' – methylene bis (phenylisocyanate)	101-68-8	0.0 – 0.2
polymethylene polyphenyl isocyanate	9016-87-9	0.0 – 0.2
toluene diisocyanate (mixed isomers)	26471-62-5	0.0 – 0.2

OSHA PELs and ACGIH TLVs are listed in Section 8 where applicable.

SECTION 3 – HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

Aluminum viscous liquid. Can cause headache, irritation, nausea, drowsiness, stupor, coughing spell and allergic respiratory sensitization. Leave area to breath fresh air. Should be observed by physician immediately if overexposure is severe.

ROUTES OF ENTRY:

Ingestion: Yes
Inhalation: Yes
Skin: Yes
Eye: Yes

INHALATION:

Can cause headache, irritation, nausea, drowsiness, stupor, coughing spell and allergic respiratory sensitization.

INGESTION:

Can cause gastrointestinal irritation.

SKIN:

Can cause irritation, sensitization, and dermatitis. Can be absorbed through skin.

EYE:

Can cause irritation.

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MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Preexisting eye, skin and respiratory disorders may be aggravated by exposure.

ACCUTE HEALTH EFFECTS:

See effects described above.

CHRONIC HEALTH EFFECTS:

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Prolonged or repeated contact/exposure to xylene and/or ethylbenzene may cause defatting, drying, and irritation of the skin, dermatitis, CNS effect described above, heart muscle sensitization and arrhythmia, hearing loss, and brain, liver, kidney, and testes damage. Prolonged xylene overexposure may affect fetal development. The risk of the effects of xylene should be insignificant in well-ventilated areas. A long-term NTP study showed that oral exposure to toluene diisocyanate (TDI) caused cancer in rats and mice. A lifetime inhalation study sponsored by the International Isocyanate Institute did not show carcinogenic activity in rats. Diphenylmethane diisocyanate (methylene bisphenyl isocyanate) caused an increased incidence of lung tumors in experimental animals following long-term inhalation at concentrations in excess of 100 times the exposure limit. Overexposure to isocyanate can cause a decrease in lung function. Skin and respiratory sensitization is possible. Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

SECTION 4 – FIRST AID MEASURES

INHALATION:

Leave area to breath fresh air. Should be observed by physician immediately if overexposure is severe.

INGESTION:

Get medical attention immediately.

SKIN:

Wash area of contact thoroughly with hand cleaner followed by soap and water. If irritation, rash, or other disorders develop, get medical attention immediately.

EYE:

Flush immediately with running water for 15 minutes, lifting the upper and lower lids occasionally. Get medical attention immediately.

SECTION 5 – FIRE-FIGHTING MEASURES

Flash Point: 103°F
Method: Setaflash
Lower Flammability Limit: Not Established
Upper Flammability Limit: Not Established
Autoignition Temperature: Not Established

EXTINGUISHING MEDIA:

If water fog is ineffective, use carbon dioxide, dry chemical, or foam.

FIRE AND EXPLOSION HAZARDS:

Never use welding or cutting torch on or near container (even empty). Product, residue, or vapor may ignite. See Section 7 for additional precautions.

SPECIAL FIRE FIGHTING PROCEDURES:

During a fire, personnel at the scene are to prevent exposure to fumes using accepted fire fighting techniques.

FIRE FIGHTING EQUIPMENT:

N/A

OTHER PRECAUTIONS:

Hydrocyanic acid, oxides of nitrogen can form.

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SECTION 6 – ACCIDENTAL RELEASE MEASURES

RELEASE RESPONSE OVERVIEW:

Remove sources of ignition immediately. Ventilate to reduce the airborne contaminant concentration below the exposure limit in Section 8 of the MSDS. Absorb spill in sand, earth, or other suitable material. Transfer to appropriate container for disposal.

SECTION 7 – HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS:

Store in closed container below 80F. Keep product and vapor away from heat, sparks, and flame. Do not store in direct sunlight. Prevent inhalation of vapor, ingestion, and contact with skin and eyes. Keep container closed when not in use. Vapor may migrate to sources of ignition. Do not smoke, weld, generate sparks, or use flame near container. Change soiled work clothes frequently. Clean hands thoroughly after handling. Precautions also apply to emptied containers. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational Exposure Limits

	<u>ACGIH TWA</u>	<u>ACGIH STEL</u>	<u>OSHA TWA</u>	<u>OSHA STEL</u>
calcium carbonate (limestone)	10 mg/m ³	(total dust, no asbestos, <1% SiO ₂)	15 mg/m ³	(total dust, 5 mg/m ³ respirable fraction)
kaolin (clay)	2.00 mg/m ³	(total dust, no asbestos, <1% SiO ₂)	10 mg/m ³	(total dust, 2 mg/m ³ respirable fraction)
xylenes (dimethylbenzenes)	100 ppm	150 ppm	100 ppm	150 ppm
titanium dioxide	10 mg/m ³	(total dust, no asbestos, <1% SiO ₂)	10 mg/m ³	Not Established
aluminum (metal)	10 mg/m ³	(metal dust, 2 mg/m ³ total soluble salts)	15 mg/m ³	(total dust, 5 mg/m ³ respirable fraction)
ethyl benzene	100 ppm	125 ppm	100 ppm	125 ppm
crystalline silica (quartz)	0.10 mg/m ³	(respirable dust)	0.10 mg/m ³	(respirable dust)
4, 4' – methylene bis (phenylisocyanate)	0.020 ppm	Not established	Not established	0.020 ppm
polymethylene polyphenyl isocyanate	0.005 ppm	Not established	Not established	0.020 ppm
toluene diisocyanate (mixed isomers)	0.005 ppm	0.020 ppm	0.005 ppm	0.020 ppm

ENGINEERING CONTROLS:

Use local exhaust when the general ventilation is not sufficient to keep the airborne contaminant concentration below the exposure limit listed above.

RESPIRATORY PROTECTION:

Wear appropriate, properly fitted NIOSH/MSHA approved respirator when airborne contaminant level(s) exceed exposure limits listed above. Select positive pressure supplied air respirator (TC19C or equivalent) for isocyanates.

EYE PROTECTION:

Wear suitable safety eyewear.

FACE PROTECTION:

Not required.

SKIN PROTECTION:

Protect hands with impervious rubber gloves and wear rubber apron and overshoes. Prevent contact with skin.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form: viscous liquid
Appearance/Color: aluminum viscous liquid
Odor: solvent
Solubility (in water): slowly reacts
pH Value: not applicable
Boiling range/Point: >250°F
Melting Point: not applicable
Freezing Point: not applicable
Vapor Pressure: not established
Vapor Density: heavier than air
% Volatile: 20%
Specific Gravity: 1.2

SECTION 10 – STABILITY AND REACTIVITY

Stability: This product is stable.
Hazardous polymerization: Hazardous polymerization will not occur.
Incompatible Products: Avoid contact with water, amines, bases, oxidizers, alcohols

SECTION 11 – TOXICOLOGICAL INFORMATION

Eyes: See Section 3
Ingestion: See Section 3
Inhalation: See Section 3
Skin: See Section 3
Subchronic: See Section 3
Chronic: See Section 3

SECTION 12 – ECOLOGICAL INFORMATION

This formulation has not been tested for environmental effects.

SECTION 13 – DISPOSAL CONSIDERATIONS

RCRA CLASS:

D001 – Ignitable Liquid or Solid Waste (RQ = 100.0 lb)

DISPOSAL METHOD:

Subject to hazardous waste treatment, storage, and disposal requirements under RCRA. Incinerate at EPA approved facility or dispose of in compliance with federal, state, and local regulations.

EPA REPORTABLE QUANTITIES:

N/A

SECTION 14 – TRANSPORT INFORMATION

DOT Shipping Name: NOT REGULATED
DOT Hazard Class:
DOT Label:
UN / NA Number:
Packing Group:
Special Provisions:

Packaging

Exceptions:
Non-Bulk:
Bulk:

Quantity Limitations

Passenger Aircraft or Railcar:
Cargo Aircraft:

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Vessel Stowage Requirements

Vessel Stowage:

Other Stowage:

Transportation Notes: N/A

SECTION 15 – REGULATORY INFORMATION

TSCA Status: On the TSCA Inventory
OSHA Status: Considered hazardous based on the following criteria: irritant, sensitizer

Target Organs

Liver, Kidney, Nerve, Blood, Reproductive, Lung, Skin, Eye

OSHA HAZARDOUS COMPONENTS:

Chemical Name	CAS Number
kaolin (clay)	1332-58-7
calcium carbonate (limestone)	1317-65-3
* crystalline silica (quartz)	14808-60-7
titanium dioxide	13463-67-7
aluminum (metal)	7429-90-5
ethyl benzene	100-41-4
xylenes (dimethylbenzenes)	1330-20-7
4, 4' – methylene bis (phenylisocyanate)	101-68-8
polymethylene polyphenyl isocyanate	9016-87-9
* toluene diisocyanate (mixed isomers)	26471-62-5

* - Chemical is listed as an IARC, NTP, OSHA, or ACGIH carcinogen

COMPLIANCE QUANTITIES:

<u>Source</u>	<u>Type</u>	<u>Threshold Unit of Measure</u>
RCRA (D001)	Reportable Quantity	100.0 pounds

SARA 311 RATINGS:

Immediate Health Hazard:	Y
Delayed Health Hazard:	Y
Fire Hazard:	Y
Reactivity Hazard:	N
Sudden Release of Pressure Hazard:	N

SARA 313 INGREDIENTS:

<u>Chemical</u>	<u>CAS Number</u>
aluminum (metal)	7429-90-5
ethyl benzene	100-41-4
1, 2, 4 – trimethyl benzene (pseudocumene)	95-63-6
xylenes (dimethylbenzenes)	1330-20-7
4, 4' – methylene bis (phenylisocyanate)	101-68-8
polymethylene polyphenyl isocyanate	9016-87-9
toluene diisocyanate (mixed isomers)	26471-62-5

PROP 65 INGREDIENTS

WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects, and / or other reproductive harm.

<u>Chemical</u>	<u>CAS Number</u>
crystalline silica (quartz)	14808-60-7
aromatic petroleum distillates	64742-95-6
toluene diisocyanate (mixed isomers)	26471-62-5

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SECTION 16 – OTHER INFORMATION

DISCLAIMER:

While the information and recommendations set forth herein are believed to be accurate as of the data hereof, McGill Airseal LLC makes no warranty, express or implied, with respect thereto and disclaims all liability from reliance thereon.