

BioCR4B Wall System		
Proper Name	Use within System	Name on General MSDS List
Polyurethane adhesive	Panel adhesive	9500 polyurethane adhesive
Dow 999 A Caulk	Caulking for batten	Caulks_all
PC liner	Batten Material	PC liner
BioCr Panel	Wall Panel	BioCr 4 Panel

Bio/CR-4B
GridLock® Panel (walls and ceilings)

General Description:

The Bio/CR-4B panel is part of the GridLock Biocontainment/Clean Room product line. The panel is 3 mm thick and is made of an aggregate of components made of polymer, metal and fiberglass composite that form an economical composite wall panel. The exposed face is composed of a polymer matrix reinforced with fibers. The polymer matrix/fibers surface finish has a gloss finish and the composite assembly is ASTM E 84 Class A for smoke and flame spread.

The panel will be supplied in standard 48" x 10' sizes. The vertical edge shall be a square edge design. Fasteners mounting hardware will be countersunk at the panel perimeter, above the ceiling and at the bottom behind the flooring cove base. The butt joints between the panels will be held at ¼ inch space and later filled with a silicone adhesive then covered by a flat batten, the surface of which will match the panel face. The panel/batten interface will receive a final sealant along both longitudinal sides. The final surface is dense, stain resistant, chemical resistant and impervious to water. It is non-generating for particulate matter and as such is ideal for walls and ceilings in animal holding, research labs and technical/pharmaceutical production spaces.

The Bio/CR-4 system is designed specifically as a biocontainment and clean room application that is applicable to several industries including BSL-3, BSL-4 facilities. Further the ability to mount these panels directly to approved substrates reduces construction time and eliminates painting and maintenance costs. It represents an economical alternative to the Bio/CR-2B panel and is suitable for either walls or ceilings.

Cleaning: GridLock Panels can withstand daily surface washing, wet wiping, dusting and vacuuming. They can withstand routine high-pressure washing and chemical disinfection and fumigation. The resinous finish will not support the growth of bacteria or mold. Ask your LSP Representative for more detailed maintenance instructions.

The panels have the following properties:

- Fire Rating:** Composite Assembly - Class 1 ASTM E 84 for flame spread of 25 or less
- Light Reflectance @ 85:** 87
- Minimum Weight:** 1.7 lbs. per square foot
- Finish:** Polyester gel coat
- Panel thickness:** 3 mm
- Color:** White
- Finish:** Semi-Gloss
- Hardness:** ASTM D-785 46 Barcol
- Flexural Mod ASTM D-790-07:** 557,693
- Flexural Strength-ASTM D 790-07:** 5325 psi
- Water Vapor Transmission ASTM E-96:** < 0.0001 perms
- Air Permeance ASTM E-2178 (L/s/m²):** 0.00001 @ 300 pa
- Tensile Strength: ASTM D-638:** 3272 psi
- Tensile Mod ASTM D-638:** 511,000
- Coefficient of Linear Thermal Expansion CLTE (mm mm C) ASTM D-696:** 4.30 E -05
- Compressive Strength ASTM D-695:** 5364 psi
- Modulus: ASTM D695:** 49,873 psi

Chemical Resistance	20% Acetic Acid	Occasional Spill
	50% Citric Acid	Good
	20% Nitric Acid	Occasional Spill
	30% Hydrochloric Acid	Occasional Spill
	10% Hydrofluoric Acid	Occasional Spill
	Hydrogen Peroxide	Good
	40% Potassium Hydroxide	Good
	40% Sodium Hydroxide	Good
	50% Sulfuric Acid	Good
	Urea	

The joint adhesive/sealant has the following properties:

Hardness Shore D	ASTM D-1706	70 - 80
Tensile Strength	ASTM D-638	3,000 psi min.
Flexural Strength	ASTM D-790	4,000 psi min.
Thermal Shock	Mil F-52505	No cracking or loss of adhesion
Abrasion Resistance (Taber Abrader, CS-17 Wheels, 1000 gm. load, 1000 cycles)	ASTM D-4060	.035 gm loss
Ultimate Elongation	ASTM D-638	20% min.



SECTION 1 Product and Company Information

PRODUCT NAME: BioCR4B Panels	Chemtrec
GENERIC NAME: Fiberglass Reinforced Plastic and Polymetal with batten	24 Hour Emergency Number 1-800-424-9300
	Information Number: 1-800-666-6216
DISTRIBUTOR: LSP Performance Resins	CRM# CCN722733
124 Speer Road	
Chestertown, MD 21620	
Comments: To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/ECC and Canadian Hazardous Products Act	

SECTION 2 Hazards Identification

<p>Emergency Overview</p> <p>This product contains no hazardous ingredients as defined under the criteria of the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. Dust and other particulates generated during cutting, shaping or forming may cause eye, skin and respiratory tract irritation. This SDS contains information on the safe handling and proper use of the product. MSDS should be available for any person(s) in use of this product.</p> <p>Emergency Overview: Not expected to cause any adverse health effects when handled as recommended.</p>	<p>Potential Health Effects</p> <p>Eyes: Dusts and particulates may cause eye irritation Skin: Dusts and particulates may cause skin irritation Ingestion: Not likely a route of exposure under normal product usage Inhalation: Dusts and particulates may cause respiratory tract irritation</p>										
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%;">Carcinogenicity: Not listed by NTP Not Listed by IARC Not Listed by OSHA</td> <td style="width:70%;"> Not listed Reproductive Effects : Not Available Teratogenic Effects: No evidence of mutagenetic effects </td> </tr> </table>	Carcinogenicity: Not listed by NTP Not Listed by IARC Not Listed by OSHA	Not listed Reproductive Effects : Not Available Teratogenic Effects: No evidence of mutagenetic effects	Signs and Symptoms of Overexposure:								
Carcinogenicity: Not listed by NTP Not Listed by IARC Not Listed by OSHA	Not listed Reproductive Effects : Not Available Teratogenic Effects: No evidence of mutagenetic effects										
GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS											
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:25%;"></th> <th style="width:25%;">Health</th> <th style="width:25%;">Environmental</th> <th style="width:25%;">Physical</th> </tr> </thead> <tbody> <tr> <td>Eye Irritant</td> <td rowspan="3" style="text-align: center;">None Known</td> <td rowspan="3" style="text-align: center;">Not Classified</td> <td rowspan="3" style="text-align: center;">Not Classified</td> </tr> <tr> <td>Skin Irritant</td> </tr> <tr> <td>Respiratory Irritant</td> </tr> </tbody> </table>			Health	Environmental	Physical	Eye Irritant	None Known	Not Classified	Not Classified	Skin Irritant	Respiratory Irritant
	Health	Environmental	Physical								
Eye Irritant	None Known	Not Classified	Not Classified								
Skin Irritant											
Respiratory Irritant											
Pictogram:											

SECTION 3 Composition / Information on Ingredients

Fiberglass Reinforced Plastic panels are solid sheets composed of glass, calcium carbonate, titanium dioxide, alumina and pigment embedded in a cured polymerized, styrenated/acrylated polyester.	Polymetal component contains (CAS#) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Aluminium 7429-90-5</td> <td style="width:50%;">Polyethylene 9002-88-4</td> </tr> <tr> <td>Magnesium 7439-95-4</td> <td>Manganese 7439-96-5</td> </tr> <tr> <td>Silicon 7440-21-3</td> <td>Iron 7439-89-6</td> </tr> <tr> <td>Chromium 7440-47-3</td> <td>Coatings</td> </tr> </table>	Aluminium 7429-90-5	Polyethylene 9002-88-4	Magnesium 7439-95-4	Manganese 7439-96-5	Silicon 7440-21-3	Iron 7439-89-6	Chromium 7440-47-3	Coatings
Aluminium 7429-90-5	Polyethylene 9002-88-4								
Magnesium 7439-95-4	Manganese 7439-96-5								
Silicon 7440-21-3	Iron 7439-89-6								
Chromium 7440-47-3	Coatings								

SECTION 4 First Aid Measures

Inhalation:	Remove person to fresh air. If other respiratory symptoms develop, or person is breathing irregular, seek medical attention immediately.
Skin Contact:	Immediately flush with large amounts of water. For itching, wash the skin with soap and water. Remove any contaminated clothing. If irritation, continues, seek medical attention.
Eye Contact:	Immediately flush eyes with plenty of water and seek medical advice. Eye injuries from glass particles should be treated by a physician immediately.
Ingestion:	Get immediate medical attention or advice Do not induce vomiting.

SECTION 5 Fire Fighting Measures

FLAMMABILITY: SEE SECTION 9 FOR FLAMMABILITY PROPERTIES – NO FIRE HAZARDS ANTICIPATED.
 FLASH POINT: HIGHER THAN PAPER, 451 F
 AUTO IGNITION TEMP: No DATA
 EXTINGUISHING MEDIA: DRY CHEMICAL, CO2, WATER SPRAY
 SPECIAL EXPOSURE: REMOVE ALL PERSONS FROM THE AREA OF INCIDENT. ISOLATE THE SCENE AND ONLY ALLOW SUITABLE PERSONAL TO TAKE ACTION.
 HAZARDOUS THERMAL: COMBUSTION MAY YIELD CO, CO2, ALIPHATIC AND AROMATIC HYDROCARBONS AND HALOGENATED COMPOUNDS. TESTS SHOW COMBUSTION GASES TO BE LESS TOXIC THAN THOSE FROM WOOD. .
 SPECIAL FIRE FIGHTING: USE MEDIA BEST SUITED FOR FIRE ENVIRONMENT. USE SELF CONTAINED BREATHING APPARATUS FOR LARGE SCALE FIRE FIGHTERS SHOULD WEAR FULL PROTECTIVE GEAR.

SECTION 6 Accidental Release Measures

No special containment and clean up procedures required. No evacuation procedures required.

SECTION 7 Handling and Storage

Storage: No special storage requirements
 Handling: Avoid dust generation. See Section 8 for personal protection.

SECTION 8 Exposure Controls / Personal Protection

EXPOSURE GUIDELINES and Limits

NAME	ACGIH	OSHA	NIOSH
Aluminum	1mg/m3 TWA	1mg/m3 TWA total dust 5mg/m3 TWA (respirable fraction)	10 mg/m3 TWA (total dust); 5mg/m3 TWA (respirable dust)
Manganese	.2 mg/m3 TWA	1mg/m3 TWA (Fume); 3mg/m3 STEL; 5 mg/m3 Ceiling	1mg/m3 TWA (Fume); 3mg/m3 STEL;
Silicon		10 mg/m3 TWA (total dust); 5mg/m3 TWA (Respirable fraction)	10 mg/m3 TWA (total dust); 5mg/m3 TWA (Respirable dust)
Chromium	.5 mg/m3 TWA	1mg/m3 TWA	.5 mg/m3 TWA

PROTECTIVE CLOTHING: **PROTECTIVE GLOVES.**
RESPIRATORY PROTECTION: **USE MSHA-NIOSH APPROVED RESPIRATOR SUCH AS 3M 8710 WHEN GENERATING DUSTS**
RESPIRATOR SHOULD BE CHOSEN BASED ON EXPOSURE LEVELS.
EYE PROTECTION: **SAFETY GLASSES WITH SIDE SHIELDS ARE RECOMMENDED TO AVOID SPLASHES, MISTS OR DUSTS.**
HYGIENE PROTECTION: **AN EYE WASH STATION AND EMERGENCY SHOWER IN WORK AREA IS RECOMMENDED. WASH SKIN WITH SOAP AND WATER AFTER HANDLING. APPROPRIATE TECHNIQUES SHOULD BE USED TO REMOVE ANY CONTAMINATED CLOTHING AND CLOTHING SHOULD BE WASHED BEFORE REUSING.**
VENTILATIONS: **VENTILATION IS NOT NORMALLY REQUIRED EXCEPT TO CONTROL DUST. DURING CUTTING, DRILLING, ETC, DUST TO BE CONTROLLED AND KEPT PARTICULATE NOT TO EXCEED 30M PPCF**
EATING AND DRINKING ARE NOT TO BE DONE IN THE AREA OF FABRICATING.

SECTION 9 Physical and Chemical Properties

Appearance	
Form	Rigid sheet
Color	varies
pH	N/A
Melting/Freezing Temperature	N/A
Boiling Point	N/A
Ignition Temperature	Not determined
Autoignition Temperature	Not applicable
Lower explosive limit; na	
Vapor Pressure	Not applicable
Vapor Density (air=1)	Not applicable

Material Safety Data Sheet BIOCR 4B Panels		
Effective Date: 01/01/2015	Previous Revision date: 00/00/0000	Date Printed: 3/24/2015

Specific Gravity (water=1 @39.2F)	446-1.8
Evaporation Rate (Bac=1)	N/P
Odor	None
Odor threshold	
Water Solubility	insoluble

SECTION 10 Stability and Reactivity	
REACTIVITY:	PRODUCT IS STABLE.
CONDITIONS TO AVOID:	AVOID DUST GENERATION
INCOMPATIBLE MATERIALS:	ALKALI, STRONG MINERAL ACIDS, HYDROFLORIC ACIDS. MAY REACT WITH STRONG OXIDIZING AGENTS.
HAZARDOUS	
POLYMERIZATION:	WILL NOT OCCUR UNDER NORMAL CONDITIONS.
HAZARDOUS	
DECOMPOSITION:	WILL NOT OCCUR UNDER NORMAL CONDITIONS. FIRE MAY PRODUCE CO₂, CO, ALPHAIC AND AROMATIC COMPOUNDS, HALOGENATED COMPONENTS LESS TOXIC THAN WOOD.

SECTION 11 Toxicological Information	
Fiberglass Reinforced Plastic United States:	Polymetal LD50/LC 50 Polyethylene – Inhalation LC50 Mouse 12 g/m3 30 Min Magnesium - Oral LD50 rat 230 mg/kg Manganese - Oral LD50 rat 9 g/kg Iron - Oral LD50 rat 984 mg/kg Silicon – Oral LD50 Rat 3160 mg/kg Carcinogenicity Aluminum – ACGIH - A4 Not classified as human carcinogen Polyethylene – IARC- Supplement 7 Monograph 19 Chromium- ACGIH A4 Not classifiable as a huma carcinogen IARC – Monograph 49 Supplement 7
Acute Toxicity – Not Available Chronic Toxicity – Not Available Irritation/Corrosion – Not Available Sensitizer – Not Available Carcinogenicity – Not Available Mutagenicity – Not Available Teratogenicity – Not Available Reproductive Toxicity – Not Available	

SECTION 12 Ecological Information	
Biodegradability:	Not determined
Aquatic Ecotoxicity: Iron - 96 HR LC50 Monroe saxatilis – 13.6 mg/L (static) 96 HR LC 50 Cyprinus carpio .56 Mg/l (semi-static)	
Specific ecotoxicological data is not available for this product.	

SECTION 13 Disposal Considerations	
Waste Disposal	
Component Waste level- Chromium RCRA- 5.0 mg/L regulatory level	
Disposal must comply with all Federal, State and Local regulations. See section 7 and 8 for handling and protection.	

SECTION 14 Transport Information	
Not classified as hazardous for transport.	DOT Classification: Not Regulated TDG Classification: Not Regulated

SECTION 15 Regulatory Information	
U.S. Federal Regulations:	
Component Analysis- This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4)	



Aluminum (7429-90-5) SARA 313: 1.0% de minimus concentration (dust or fume only)

Manganese (7439-96-5) SARA 313: 1.0% de minimus concentration

Chromium (7440-47-3) CERCLA: 5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers) 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers)

State Regulations

Component Analysis – State-

Component	CAS	CA	MA	MN	NJ	PA	RI
Aluminum	7429-90-5	Yes	Yes	Yes	Yes	Yes	Yes
Magnesium	7439-95-4	Yes	Yes	No	Yes	Yes	Yes
Manganese	7439-96-5	Yes	Yes	Yes	Yes	Yes	Yes
Iron	7439-89-6	Yes	No	No	No	No	No
Silicon	7440-21-3	No	Yes	Yes	Yes	Yes	Yes
Chromium	7440-47-3	Yes	Yes	Yes	Yes	Yes	Yes

Component Analysis – WHMIS-DL The following components are identified under the Canadian Hazardous Products Act Ingredients Disclosure Act

Component	CAS	Minimum Concentration
Aluminum	7429-90-5	1%
Manganese	7439-96-5	1%
Chromium	7440-47-3	0.1%

Additional Regulatory Information

Component Analysis – Inventory

Component	CAS	TSCA	CAN	EEC
Aluminum	7429-90-5	Yes	DSL	EINECS
Magnesium	7439-95-4	Yes	DSL	No
Manganese	7439-96-5	Yes	DSL	EINECS
Iron	7439-89-6	Yes	DSL	EINECS
Silicon	7440-21-3	Yes	DSL	EINECS
Chromium	7440-47-3	Yes	DSL	EINECS

SECTION 16 Other Information

Revised to be in compliance with new GHS regulations due by 12/1/2013.

DISCLAIMER: The above information is provided on the data available to us and believed to be true and accurate. The information contained herein is offered in good faith and no warranty, expressed or implied, are made regarding the accuracy of this data since conditions or use is beyond our control. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. LSP, Inc. assumes no responsibilities for the use of handling of this product.

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or results to be obtained from the user thereof. LSP Performance Resins assumes no responsibility for personal injury or property damage to vendees, such vendees or users assume all risks associated with the use of the material.

SECTION 1 Product and Company Information

PRODUCT NAME: PC Panels and Liners GENERIC NAME: Fiberglass reinforced Plastic DISTRIBUTOR: Life Science Products 124 Speer Road Chestertown, MD 21620	Chemtrec 24 Hour Emergency Number 1-800-424-9300 Information Number: 1-800-666-6216 CRM# CCN722733
Comments: To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/ECC and Canadian Hazardous Products Act	

SECTION 2 Hazards Identification

Emergency Overview This product contains no hazardous ingredients as defined under the criteria of the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. Dust and other particulates generated during cutting, shaping or forming may cause eye, skin and respiratory tract irritation. This SDS contains information on the safe handling and proper use of the product. MSDS should be available for any person(s) in use of this product. Emergency Overview: Not expected to cause any adverse health effects when handled as recommended.	Potential Health Effects Eyes: Dusts and particulates may cause eye irritation Skin: Dusts and particulates may cause skin irritation Ingestion: Not likely a route of exposure under normal product usage Inhalation: Dusts and particulates may cause respiratory tract irritation		
Carcinogenicity: Not listed by NTP Not Listed by IARC Not Listed by OSHA	Not listed Reproductive Effects : Not Available Teratogenic Effects: No evidence of mutagenetic effects	Signs and Symptoms of Overexposure:	
GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS			
	Health	Environmental	Physical
Eye Irritant Skin Irritant, sensitizer Respiratory Irritant	None Known	Not Classified	Not Classified
Pictogram:			

SECTION 3 Composition / Information on Ingredients

F.R.P. panels are solid sheets composed of glass, calcium carbonate, titanium dioxide, alumina and pigment embedded in a cured polymerized, styrenated/acrylated polyester.

SECTION 4 First Aid Measures

Inhalation:	Remove person to fresh air. If other respiratory symptoms develop, or person is breathing irregular, seek medical attention immediately.
Skin Contact:	N/A
Eye Contact:	Immediately flush eyes with plenty of water for at least 15 minutes..
Ingestion:	N/A

SECTION 5 Fire Fighting Measures

FLAMMABILITY:	NO FIRE HAZARDS ANTICIPATED.
FLASH POINT:	HIGHER THAN PAPER, 451 F
AUTO IGNITION TEMP:	NO DATA
EXTINGUISHING MEDIA:	DRY CHEMICAL, CO2, WATER SPRAY

Material Safety Data Sheet PC Panels

Effective Date: 01/01/2015

Previous Revision date: 00/00/0000

Date Printed: 3/19/2015

SPECIAL EXPOSURE: REMOVE ALL PERSONS FROM THE AREA OF INCIDENT. ISOLATE THE SCENE AND ONLY ALLOW SUITABLE PERSONAL TO TAKE ACTION.
HAZARDOUS THERMAL: COMBUSTION MAY YIELD CO, CO₂, ALPHAIC AND AROMATIC HYDROCARBONS AND HALOGENATED COMPOUNDS. TESTS SHOW COMBUSTION GASES TO BE LESS TOXIC THAN THOSE FROM WOOD. .
SPECIAL FIRE FIGHTING: USE MEDIA BEST SUITED FOR FIRE ENVIRONMENT. USE SELF CONTAINED BREATHING APPARATUS FOR LARGE SCALE FIRE

SECTION 6 Accidental Release Measures

No special containment and clean up procedures required. No evacuation procedures required.

SECTION 7 Handling and Storage

Storage: No special storage requirements
Handling: Avoid dust generation. See Section 8 for personal protection.

SECTION 8 Exposure Controls / Personal Protection

EXPOSURE GUIDELINES and Limits

PROTECTIVE CLOTHING: **PROTECTIVE GLOVES.**
RESPIRATORY PROTECTION: **USE MSHA-NIOSH APPROVED RESPIRATOR SUCH AS 3M 8710 WHEN GENERATING DUSTS**
RESPIRATOR SHOULD BE CHOSEN BASED ON EXPOSURE LEVELS.
EYE PROTECTION: **SAFETY GLASSES WITH SIDE SHIELDS ARE RECOMMENDED TO AVOID SPLASHES, MISTS OR DUSTS.**
HYGIENE PROTECTION: **AN EYE WASH STATION AND EMERGENCY SHOWER IN WORK AREA IS RECOMMENDED. WASH SKIN WITH SOAP AND WATER AFTER HANDLING. APPROPRIATE TECHNIQUES SHOULD BE USED TO REMOVE ANY CONTAMINATED CLOTHING AND CLOTHING SHOULD BE WASHED BEFORE REUSING.**
VENTILATIONS: **VENTILATION IS NOT NORMALLY REQUIRED EXCEPT TO CONTROL DUST. DURING CUTTING, DRILLING, ETC, DUST TO BE CONTROLLED AND KEPT PARTICULATE NOT TO EXCEED 30M PPCF**
EATING AND DRINKING ARE NOT TO BE DONE IN THE AREA OF FABRICATING.

SECTION 9 Physical and Chemical Properties

Appearance	
Form	Rigid sheet
Color	varies
pH	N/A
Melting/Freezing Temperature	N/A
Boiling Point	N/A
Ignition Temperature	Not determined
Autoignition Temperature	Not applicable
Lower explosive limit; na	
Vapor Pressure	Not applicable
Vapor Density (air=1)	Not applicable
Specific Gravity (water=1 @39.2F)	N/A
Evaporation Rate (Bac=1)	N/P
Odor	None
Odor threshold	
Water Solubility	insoluble

SECTION 10 Stability and Reactivity

REACTIVITY: **PRODUCT IS STABLE.**
CONDITIONS TO AVOID: **AVOID DUST GENERATION**
INCOMPATIBLE MATERIALS: **ALKALI, STRONG MINERAL ACIDS, HYDROFLORIC ACIDS. MAY REACT WITH STRONG OXIDIZING AGENTS.**
HAZARDOUS
POLYMERIZATION: **WILL NOT OCCUR UNDER NORMAL CONDITIONS.**
HAZARDOUS
DECOMPOSITION: **WILL NOT OCCUR UNDER NORMAL CONDITIONS. FIRE MAY PRODUCE Co₂, Co, ALPHAIC AND AROMATIC COMPOUNDS, HALOGENATED COMPONENTS LESS TOXIC THAN WOOD.**

SECTION 11 Toxicological Information

United States: Acute Toxicity – Not Available
 Chronic Toxicity – Not Available
 Irritation/Corrosion – Not Available
 Sensitizer – Not Available
 Carcinogenicity – Not Available
 Mutagenicity – Not Available
 Teratogenicity – Not Available
 Reproductive Toxicity – Not Available

SECTION 12 Ecological Information

Biodegradability: Not determined
 Aquatic Ecotoxicity: Not Determined
 Specific ecotoxicological data is not available for this product.

SECTION 13 Disposal Considerations

Waste Disposal
 Component Waste level- Chromium RCRA- 5.0 mg/L regulatory level
 Disposal must comply with all Federal, State and Local regulations. See section 7 and 8 for handling and protection.

SECTION 14 Transport Information

Not classified as hazardous for transport.	DOT Classification: Not Regulated TDG Classification: Not Regulated
---	--

SECTION 15 Regulatory Information

U.S. Federal Regulations:
 None Specified

SECTION 16 Other Information

Revised to be in compliance with new GHS regulations due by 12/1/2013.
DISCLAIMER: The above information is provided on the data available to us and believed to be true and accurate. The information contained herein is offered in good faith and no warranty, expressed or implied, are made regarding the accuracy of this data since conditions or use is beyond our control. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. LSP, Inc. assumes no responsibilities for the use of handling of this product.

MATERIAL SAFETY DATA SHEET



PREMIER BUILDING SOLUTIONS, INC.

Page 1 of 10
Version: 1.2
Revision Date: 01/07/2014

XTRABOND 9500 MODIFIED POLYURETHANE SEALANT WHITE

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Brand Name: XtraBond 9500 Modified Hybrid Sealant

Product Use: Sealant & Adhesive

Proper DOT Shipping: Caulking & Glaziers, NOI

DOT Hazard Classification: NONE

Molecular Formula: Mixture

NFPA Profile: Health 2 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

Company Contact Information

Premier Building Solutions, Inc.
480 Nova Drive
Massillon, OH. 44646

Emergency Telephone Number

CHEMTREC: 800-424-9300 (24 hours)
Telephone: 866-512-4583

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Acute Effects

- Eye:** Direct contact may cause moderate irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.
- Skin:** May cause moderate irritation. Symptoms may include redness and burning of skin.
- Inhalation:** Irritates respiratory passages very slightly. Vapor overexposure may be harmful and cause drowsiness.
- Oral:** Swallowing large amounts may cause drowsiness.

Prolonged/Repeated Exposure Effects

- Skin:** Repeated or prolonged contact may cause defatting and drying of skin which may result in skin irritation and dermatitis. Overexposure by skin absorption may injure the following organ(s): Liver.
- Inhalation:** Overexposure by inhalation may injure the following organ(s): Liver.
- Oral:** Overexposure by ingestion may injure the following organ(s): Liver.

MATERIAL SAFETY DATA SHEET



PREMIER BUILDING SOLUTIONS, INC.

Page 2 of 10
Version: 1.2
Revision Date: 01/07/2014

XTRABOND 9500 MODIFIED POLYURETHANE SEALANT WHITE

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

Eye or skin disease.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
1317-65-3	<50%	Calcium Carbonate
-----	<50%	Proprietary Polymers
13463-67-7	<10%	Titanium Dioxide

The above components are hazardous as defined in 29 CFR 1910.1200.

4. FIRST AID MEASURES

Eye:	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 – 20 minutes while holding the eyelid(s) open. If contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately obtain medical attention.
Skin:	Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Flush with lukewarm gently flowing water for 15 minutes. If irritation persists, repeat flushing. If irritation persists, obtain medical advice.
Inhalation:	Material is not likely to present an inhalation hazard at ambient conditions. If material is heated or vapor is generated, care should be taken to prevent inhalation. In case of exposure to vapor, move to fresh air.
Oral:	Never give anything by mouth if victim is rapidly losing consciousness or convulsing. DO NOT INDUCE VOMITING. Have victim drink 2 to 8 oz. (60 to 240 mL) of water. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Have victim rinse mouth with water again. Obtain medical attention.

Note to Physician: Treat according to person's condition and specifics of exposure.

MATERIAL SAFETY DATA SHEET



PREMIER BUILDING SOLUTIONS, INC.

Page 3 of 10
Version: 1.2
Revision Date: 01/07/2014

XTRABOND 9500 MODIFIED POLYURETHANE SEALANT WHITE

5. FIRE FIGHTING MEASURES

- Flash Point: > 212F/100C (Closed Cup)
- Autoignition Temperature: Not determined.
- Flammability Limits in Air: Not determined.
- Extinguishing Media: On large fires use fog, foam or water spray. On small fires use carbon dioxide (CO₂), dry chemical or foam. Water can be used to cool fire exposed containers.
- Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
- Unusual Fire Hazards: None.

6. ACCIDENTAL RELEASE MEASURES

- Containment/Clean up: Ventilate area. Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See Section 8 for Personal Protective Equipment for Spills.

7. HANDLING AND STORAGE

Use with adequate ventilation to keep area below established exposure levels. Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally.

Use reasonable care and store away from acidic and oxidizing materials. Keep container closed and store away from water or moisture.

MATERIAL SAFETY DATA SHEET



PREMIER BUILDING SOLUTIONS, INC.

Page 4 of 10
Version: 1.2
Revision Date: 01/07/2014

XTRABOND 9500 MODIFIED POLYURETHANE SEALANT WHITE

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Component Exposure Limits

<u>CAS Number</u>	<u>Component Name</u>	<u>Exposure Limits</u>
1317-65-3	Calcium Carbonate	OSHA PEL 15 mg/m ³ , ACGIH TLV 10 mg/m ³
13463-67-7	Titanium Dioxide	OSHA PEL 15 mg/m ³ , ACGIH TLV 10 mg/m ³

Exposure limits are provided for information only. These chemicals are not in a respirable form in this product.

Engineering Controls

Local Ventilation: Recommended.

General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

Suitable Gloves: Avoid skin contact by implementing good industrial hygiene practices and procedures. Select and use gloves and/or protective clothing to further minimize the potential for skin contact. Consult with your glove and/or personnel protective equipment manufacturer for selection of appropriate compatible materials.

Inhalation: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls.

Suitable Respirator: Respiratory protection is not needed under ambient conditions. If vapor is generated when material is heated or handled, the following is advised. General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

MATERIAL SAFETY DATA SHEET



PREMIER BUILDING SOLUTIONS, INC.

Page 5 of 10
Version: 1.2
Revision Date: 01/07/2014

XTRABOND 9500 MODIFIED POLYURETHANE SEALANT WHITE

Personal Protective Equipment for Spills

Eyes:	Use full face respirator.
Skin:	Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.
Inhalation/Suitable Respirator:	Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MHSA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Precautionary Measures:	Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally. Use reasonable care.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical Form: Paste
Color: N/A
Odor: Mild
Specific Gravity @ 25°C: ~1.3 – 1.7
Viscosity: Not determined.
Freezing/Melting Point: Not determined.
Boiling Point: Not determined.
Vapor Pressure @ 25°C: Not determined.
Vapor Density: Not determined.
Solubility in Water: Slightly soluble
pH: Not determined.
Flash Point: > 212F/100C (Closed Cup)
Autoignition Temperature: Not determined.
Flammability Limits in Air: Not determined.
VOLATILE ORGANIC COMPOUNDS (VOC): Product complies with State and Federal regulations for VOC content.

Note: The above information is not intended for use in preparing product specifications.

MATERIAL SAFETY DATA SHEET



PREMIER BUILDING SOLUTIONS, INC.

Page 6 of 10
Version: 1.2
Revision Date: 01/07/2014

XTRABOND 9500 MODIFIED POLYURETHANE SEALANT WHITE

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to Avoid: Avoid temperatures above 120 °F.

Materials to Avoid: Acidic and oxidizing material can cause a reaction.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Metal oxides. Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Component Toxicology Information

For Product

Not Established

For Titanium Dioxide

Trochimowicz, et al.c J. Appl. Tox., 8, 383-385 (1988)

Oral LD (rat) >25g/kg
Dermal LD (rabbit) >10 g/kg
Inhalation LC (rat) >6.82 mg/l (4 hr)

Special Hazard Information on Components

None

MATERIAL SAFETY DATA SHEET



PREMIER BUILDING SOLUTIONS, INC.

Page 7 of 10
Version: 1.2
Revision Date: 01/07/2014

XTRABOND 9500 MODIFIED POLYURETHANE SEALANT WHITE

12. ECOLOGICAL CONSIDERATIONS

Environmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <=2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

State or local laws may impose additional regulatory requirements regarding disposal.

14. TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Not subject to DOT.

Ocean Shipment (IMDG)

Not subject to IMDG code.

Air Shipment (IATA)

MATERIAL SAFETY DATA SHEET



PREMIER BUILDING SOLUTIONS, INC.

Page 8 of 10
Version: 1.2
Revision Date: 01/07/2014

XTRABOND 9500 MODIFIED POLYURETHANE SEALANT WHITE

Not subject to IATA regulations.

15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This material is considered hazardous.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances (40 CFR 355):

None.

Section 304 CERCLA Hazardous Substances (40 CFR 302):

None.

Section 311/312 Hazard Class (40 CFR 370):

Acute: Yes
Chronic: No
Fire: No
Pressure: No
Reactive: No

Section 313 Toxic Chemicals (40 CFR 372):

None present or none present in regulated quantities.

Note: Chemicals are listed under the 313 Toxic Chemicals section only if they meet or exceed a reporting threshold.

MATERIAL SAFETY DATA SHEET



PREMIER BUILDING SOLUTIONS, INC.

Page 9 of 10
Version: 1.2
Revision Date: 01/07/2014

XTRABOND 9500 MODIFIED POLYURETHANE SEALANT WHITE

Work Place Hazardous Material Information Sysystems (CRP Section 33)

This product has been classified according to the hazard criteria of the Controlled Products Regulation and the MSDS contains all required information.

3 Controlled Product: Classification: D2B

Supplemental State Compliance Information

California

To the best of our knowledge, this product contains no levels of chemicals listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

Massachusetts

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
13463-67-7	<10%	Titanium Dioxide

Minnesota

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
13463-67-7	<10%	Titanium Dioxide

New Jersey

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
13463-67-7	<10%	Titanium Dioxide (SN 1861)

Pennsylvania

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
13463-67-7	<10%	Titanium Dioxide

Rhode Island

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
13463-67-7	<10%	Titanium Dioxide

MATERIAL SAFETY DATA SHEET



PREMIER BUILDING SOLUTIONS, INC.

Page 10 of 10
Version: 1.2
Revision Date: 01/07/2014

XTRABOND 9500 MODIFIED POLYURETHANE SEALANT WHITE

WHMIS Classification.....D2

NOTE: THE PRODUCT LISTED ON THIS MSDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS MSDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

16. OTHER INFORMATION

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

<http://www.xtrabond.com>



DOW CORNING CORPORATION

Material Safety Data Sheet

Page: 1 of 7
Version: 1.3
Revision Date: 2006/01/23

DOW CORNING(R) 999A SILICONE GLAZING SEALANT, CLEAR

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Dow Corning Corporation South Saginaw Road Midland, Michigan 48686	24 Hour Emergency Telephone: (989) 496-5900 Customer Service: (989) 496-6000 Product Disposal Information: (989) 496-6315 CHEMTREC: (800) 424-9300
--	--

MSDS No.: 02323419 Revision Date: 2006/01/23

Generic Description: Silicone elastomer
Physical Form: Paste
Color: Colorless
Odor: Acetic acid odor

NFPA Profile: Health 2 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

2. OSHA HAZARDOUS COMPONENTS

CAS Number	Wt %	Component Name
17689-77-9	1.0 - 5.0	Ethyltriacetoxysilane
4253-34-3	1.0 - 5.0	Methyltriacetoxysilane

The above components are hazardous as defined in 29 CFR 1910.1200.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Acute Effects

Eye: Direct contact may cause moderate irritation.

Skin: May cause moderate irritation.

Inhalation: Irritates respiratory passages very slightly.

Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin: No known applicable information.

Inhalation: No known applicable information.

Oral: No known applicable information.

DOW CORNING(R) 999A SILICONE GLAZING SEALANT, CLEARSigns and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

4. FIRST AID MEASURES

Eye:	Immediately flush with water for 15 minutes. Get medical attention.
Skin:	Remove from skin and wash thoroughly with soap and water or waterless cleanser. Get medical attention if irritation or other ill effects develop or persist.
Inhalation:	No first aid should be needed.
Oral:	No first aid should be needed.
Comments:	Treat according to person's condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

Flash Point:	Not applicable.
Autoignition Temperature:	Not determined.
Flammability Limits in Air:	Not determined.
Extinguishing Media:	On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO ₂), dry chemical or water spray. Water can be used to cool fire exposed containers.
Fire Fighting Measures:	Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
Unusual Fire Hazards:	None.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

6. ACCIDENTAL RELEASE MEASURES

**DOW CORNING CORPORATION
Material Safety Data Sheet****DOW CORNING(R) 999A SILICONE GLAZING SEALANT, CLEAR**

Containment/Clean up: Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call (989) 496-5900, if additional information is required.

7. HANDLING AND STORAGE

Use with adequate ventilation. Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc within exposure guidelines or use respiratory protection. Avoid eye contact.

Keep container closed and store away from water or moisture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Component Exposure Limits**

<u>CAS Number</u>	<u>Component Name</u>	<u>Exposure Limits</u>
17689-77-9	Ethyltriacetoxysilane	See acetic acid comments.
4253-34-3	Methyltriacetoxysilane	See acetic acid comments.

Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10 ppm and ACGIH TLV: TWA 10 ppm, STEL 15 ppm.

Engineering Controls

Local Ventilation: None should be needed.
General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

Suitable Gloves: Silver Shield(R). 4H(R).

DOW CORNING(R) 999A SILICONE GLAZING SEALANT, CLEAR

Inhalation: No respiratory protection should be needed.

Suitable Respirator: None should be needed.

Personal Protective Equipment for Spills

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

Inhalation/Suitable Respirator: No respiratory protection should be needed.

Precautionary Measures: Avoid eye contact. Use reasonable care.

Comments: Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc within exposure guidelines or use respiratory protection.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Paste

Color: Colorless

Odor: Acetic acid odor

Specific Gravity @ 25°C: 1.04

Viscosity: Not determined.

Freezing/Melting Point: Not determined.

Boiling Point: Not determined.

Vapor Pressure @ 25°C: Not determined.

Vapor Density: Not determined.

Solubility in Water: Not determined.

pH: Not determined.

Volatile Content: Not determined.

Note: The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to Avoid: None.

DOW CORNING(R) 999A SILICONE GLAZING SEALANT, CLEAR

Materials to Avoid: Oxidizing material can cause a reaction. Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8.

11. TOXICOLOGICAL INFORMATION

Special Hazard Information on Components

No known applicable information.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <= 2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

State or local laws may impose additional regulatory requirements regarding disposal.

Call (989) 496-6315, if additional information is required.

14. TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Not subject to DOT.

Ocean Shipment (IMDG)

DOW CORNING(R) 999A SILICONE GLAZING SEALANT, CLEAR

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations.

Call Dow Corning Transportation, (989) 496-8577, if additional information is required.

15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings**Section 302 Extremely Hazardous Substances (40 CFR 355):**

None.

Section 304 CERCLA Hazardous Substances (40 CFR 302):

None.

Section 311/312 Hazard Class (40 CFR 370):

Acute: Yes
Chronic: No
Fire: No
Pressure: No
Reactive: No

Section 313 Toxic Chemicals (40 CFR 372):

None present or none present in regulated quantities.

Supplemental State Compliance Information**California**

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

Massachusetts

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
-------------------	-------------	-----------------------

DOW CORNING(R) 999A SILICONE GLAZING SEALANT, CLEAR

7631-86-9 7.0 - 13.0 Silica, amorphous

New Jersey

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
70131-67-8	> 60.0	Dimethyl siloxane, hydroxy-terminated
7631-86-9	7.0 - 13.0	Silica, amorphous
17689-77-9	1.0 - 5.0	Ethyltriacetoxysilane
4253-34-3	1.0 - 5.0	Methyltriacetoxysilane

Pennsylvania

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
70131-67-8	> 60.0	Dimethyl siloxane, hydroxy-terminated
7631-86-9	7.0 - 13.0	Silica, amorphous

16. OTHER INFORMATION

Prepared by: Dow Corning Corporation

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

(R) indicates Registered Trademark

Material Safety Data Sheet

Construction Chemicals

NP 1™

Version 1.6

10/28/2004

1. PRODUCT AND COMPANY INFORMATION

Company : **Degussa Building Systems**
 889 Valley Park Drive
 Shakopee, MN 55379

Telephone : 952-496-6000

Emergency telephone number : (800) 424-9300
 (703) 527-3887 (Outside Continental US)

Product name : NP 1™

MSDS ID No. : 11502

TSCA Inventory : All components of this product are included, or are exempt from inclusion, in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Canadian DSL : May contain chemicals not listed.

2. HAZARDOUS INGREDIENTS

<u>Chemical</u>	<u>CAS No.</u>	<u>TLV</u>	<u>STEL</u>	<u>PEL</u>	<u>CEIL</u>	<u>Weight %</u>
STODDARD SOLVENT	8052-41-3	100 ppm	N.E.	500 ppm	N.E.	0.00 - 10.00 %
SILICA, CRYSTALLINE QUARTZ	14808-60-7	0.05 mg/m3	N.E.	0.1 mg/m3	N.E.	0.10 - 1.00 %

3. HAZARDS IDENTIFICATION

HMIS® Rating : HEALTH 2 FLAMMABILITY 1 PHYSICAL HAZARD 0

WHMIS Class : D2B

Primary Routes of Entry : Ingestion
 Inhalation
 Eye contact
 Skin contact

Effects of Overexposure

Inhalation : Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Inhalation of high vapor concentrations can cause CNS-depression and narcosis. Prolonged inhalation can be harmful.

Skin : Can cause slight irritation. May cause sensitization by skin contact.

Eyes : Can cause slight irritation.

Ingestion : May be harmful if swallowed.

Chronic exposure : Existing respiratory or skin ailments may be aggravated by exposure. This product may contain a small amount (<0.1%) of toluene diisocyanate. NIOSH, NTP and IARC list toluene diisocyanate as a suspected carcinogen. Note also that prolonged repeated

Material Safety Data Sheet

Construction Chemicals

NP 1™

Version 1.6

10/28/2004

exposure to isocyanates can lead to skin sensitization. For persons so sensitized even brief exposures to an isocyanate can produce reddening, swelling, rash, or blisters. Similarly, prolonged and repeated exposure to isocyanates can lead to respiratory sensitization. In such individuals, brief exposures to isocyanates at levels well below established exposure limits can produce chemical asthma and nonspecific asthmatic conditions. This product contains Crystalline (quartz) Silica which has been listed as a human carcinogen by NTP (Group 1) and IARC (Human Carcinogen) and a Suspected Human Carcinogen by ACGIH (category A2). Repeated or prolonged over exposure to free respirable Crystalline (quartz) silica can cause silicosis or other delayed and serious lung injury. No exposure to respirable Crystalline (quartz) Silica anticipated with recommended use of product. This product contains solvents. Reports associate repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Reports also indicate that solvents cause liver damage, kidney damage, and mucous membrane irritation. Be warned that intentional misuse by deliberately inhaling the vapors and/or the product contents (a process often called "sniffing") can be harmful or fatal.

Carcinogenicity

	ACGIH	IARC	NTP	OSHA
STODDARD SOLVENT	N.E.	No data.	N.E.	N.E.
SILICA, CRYSTALLINE QUARTZ	Suspected human carcinogen.	Human carcinogen.	Known carcinogen.	N.E.

4. FIRST AID MEASURES

Eye contact	:	Flush eyes with water, lifting upper and lower lids occasionally for 15 minutes. Seek medical attention.
Skin contact	:	Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists seek medical attention. Wash contaminated clothing before reuse.
Ingestion	:	Do not induce vomiting without medical advice. If conscious, drink plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician. If a person vomits, place him/her in the recovery position. Never give anything by mouth to an unconscious person.
Inhalation	:	Remove victim from exposure. If difficulty with breathing, administer oxygen. If breathing has stopped administer artificial respiration, preferably mouth-to-mouth. Seek immediate medical attention.

5. FIRE-FIGHTING MEASURES

Flash point	:	> 200.01 °F (93.34 °C) Method: SETAFLASH
Autoignition temperature	:	no data available
Lower explosion limit	:	no data available
Upper explosion limit	:	no data available
Suitable extinguishing media	:	water fog carbon dioxide (CO2) foam dry chemical water spray
Fire and Explosion Hazards	:	Fire may produce irritating or poisonous fumes. Solid stream of water or foam can cause frothing.

Material Safety Data Sheet

Construction Chemicals

NP 1™

Version 1.6

10/28/2004

Special Fire-fighting Procedures : At higher temperature pressure build up in sealed containers. Use water to cool containers exposed to fire. As in any fire, wear pressure demand self-contained breathing apparatus (NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up : Ventilate the area and remove all sources of ignition. Evacuate unnecessary personnel. Take action to eliminate source of leak. Large spills should be handled carefully. Put on respiratory protection and necessary personal protective equipment. Dike or impound spilled Liquid. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling : Keep out of reach of children. For personal protection see section 8.

Storage : Keep tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye protection : Wear as appropriate:
safety glasses with side-shields
goggles
face-shield

Hand protection : Wear Chemically resistant gloves.

Body Protection : Wear as appropriate:
impervious clothing
preventive skin protection

Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use NIOSH approved respirators.

Hygienic Practices : Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

Engineering Controls : Local exhaust ventilation can be necessary to control any air contaminants to within their TLVs during the use of this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color : pigmented

Physical State : paste

Odor : slight

pH (at 100 %) : not applicable

Material Safety Data Sheet

Construction Chemicals

NP 1™

Version 1.6

10/28/2004

Odor Threshold	:	no data available
Vapor Pressure	:	no data available
Vapor Density	:	no data available
Boiling point/range	:	no data available
Freeze Point	:	no data available
Water solubility	:	insoluble
Specific Gravity	:	1.21
Viscosity	:	4,000 - 16,000 poise
Evaporation rate	:	Slower than ether
Partition coefficient (n-octanol/water)	:	no data available
VOC Concentration as applied (less water and exempt solvents)	:	42.36 g/l

10. STABILITY AND REACTIVITY

Stability	:	Stable under recommended storage conditions.
Conditions to avoid	:	Prolonged exposure to high temperatures
Materials to avoid	:	strong oxidizing agents
Hazardous decomposition products	:	Oxides of carbon nitrogen oxides (NOx)
Hazardous polymerization	:	Will not occur under normal conditions.

11. TOXICOLOGICAL INFORMATION

Acute inhalation toxicity

<u>Product</u>	<u>Type</u> LC50	<u>Value</u>	<u>Species</u>	<u>Exposure time</u>
<u>Component</u>				
STODDARD SOLVENT	LC50	no data available		
SILICA, CRYSTALLINE QUARTZ	LC50	no data available		

Acute oral toxicity

<u>Type</u>	<u>Value</u>	<u>Species</u>
-------------	--------------	----------------

Material Safety Data Sheet

Construction Chemicals

NP 1™

Version 1.6

10/28/2004

Product LD50 (Oral) no data available

Component

STODDARD SOLVENT LD50 (Oral) no data available
SILICA, CRYSTALLINE QUARTZ LD50 (Oral) 1,300 mg/kg

Acute dermal toxicity

Type Value Species

Product LD50 (Dermal) no data available

Component

STODDARD SOLVENT LD50 (Dermal) no data available
SILICA, CRYSTALLINE QUARTZ LD50 (Dermal) no data available

12. ECOLOGICAL INFORMATION

Ecotoxicological Information : There is no data available for this product.

13. DISPOSAL CONSIDERATIONS

Recommendations: Use excess product in an alternate beneficial application. Handle disposal of waste material in manner which complies with local, state, province and federal regulation.

14. TRANSPORT INFORMATION

DOT : Proper shipping name Not regulated

IATA : Proper shipping name Not regulated

15. REGULATORY INFORMATION

SARA 311/312 (RTK)

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE (ACUTE) HEALTH HAZARD DELAYED (CHRONIC) HEALTH HAZARD

SARA 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Weight % CAS No. Chemical Name

This product contains no chemicals subject to the SARA 313 supplier notification requirements.

Material Safety Data Sheet

Construction Chemicals

NP 1™

Version 1.6

10/28/2004

CERCLA

CERCLA section 103(a) specifically requires the person in charge of a vessel or facility to report immediately to the National Response Center (NRC) a release of a hazardous substance whose amount equals or exceeds the assigned RQ. The following hazardous substances are contained in this product.

<u>RQ</u>	<u>CAS No.</u>	<u>Chemical Name</u>
-----------	----------------	----------------------

No CERCLA chemicals exist in this product above reportable concentrations.

TSCA Section 12(b) Export Notification

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

<u>CAS No.</u>	<u>Chemical Name</u>
108-90-7	CHLOROBENZENE

California Proposition 65

The chemical(s) noted below and contained in this product, are known to the state of California to cause cancer, birth defects or other reproductive harm. Unless otherwise specified in Section 2 of this MSDS, these chemicals are present at < 0.1%:

<u>CAS No.</u>	<u>Chemical Name</u>
7439-92-1	INORGANIC LEAD
7440-43-9	CADMIUM
7440-38-2	ARSENIC
7440-02-0	NICKEL
584-84-9	2,4-TOLUENE DIISOCYANATE
91-08-7	2,6 TOLUENE DIISOCYANATE
71-43-2	BENZENE
14808-60-7	SILICA, CRYSTALLINE QUARTZ
108-88-3	TOLUENE

16. OTHER INFORMATION

Legend : N.E. - Not Established
TLV - Threshold Limit Value
STEL - Short Term Exposure Limit
PEL - Permissible Exposure Limit
CEIL - Ceiling

Prepared By : Environment, Health and Safety Department

This information is furnished without warranty, representation, or license of any kind, except that this information is accurate to the best of the manufacturer's knowledge, or is obtained from sources believed by the manufacturer to be accurate and is not intended to be all inclusive. No warranty is expressed or implied regarding the accuracy of this information or the results to be obtained from its use thereof. The manufacturer assumes no responsibility for injuries proximately caused by use of the Material if reasonable safety procedures are not followed as stipulated in this Data Sheet. Additionally, the manufacturer assumes no responsibility for injuries proximately caused by abnormal use of the Material even if reasonable safety procedures are followed. Buyer assumes the risk in its use of the Material.

End of MSDS.



MATERIAL SAFETY DATA SHEET

Schnee-Morehead®, Inc.

SECTION VII - HEALTH HAZARD DATA

ROUTE(S) OF ENTRY: **INHALATION?:** Yes **SKIN?:** Yes **INGESTION?:** Not Likely

HEALTH HAZARDS (ACUTE AND CHRONIC):

Like all urethane sealants, this product contains isocyanate resins which may cause irritation to the eyes or skin on contact. Tests have shown that no volatile isocyanates are present. Small amounts of residual toluene present may cause skin and respiratory tract irritation.

CARCINOGENICITY: **NTP?:** No **IARC MONOGRAPHS?:** No **OSHA REGULATED?:** Yes

SIGNS AND SYMPTOMS OF EXPOSURE: Upon exposure to the skin, the skin may turn red and burn. A person sensitive to organic solvents may have shortness of breath when using this product.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

This product may be irritating to a person with known allergies.

EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact - Flush with warm water for 15 minutes and seek medical attention.
 Skin Contact - Wash with warm water for 15 minutes. If irritation persists, contact a physician.
 Inhalation - Move victim to fresh air. If breathing has stopped give artificial respiration. Seek immediate medical attention.
 Ingestion - Do not induce vomiting. Seek medical attention.

SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:

Eliminate all ignition sources. Ventilate the area. Supply clean-up personnel with appropriate clothing (respirators, gloves, etc....), clean the material with mineral spirits or a mixture of toluene/alcohol if in an uncured state (wet and pliable). If the material is cured, use a solvent such as Dynasolve.

WASTE DISPOSAL METHOD:

Cured or neutralized waste product can be landfilled or incinerated. Consult and follow all local, state and federal compliance regulations before disposing of the product.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Store in a clean dry place. Moisture will cause the material to cure.

SECTION IX - CONTROL MEASURES

RESPIRATORY PROTECTION:

Not normally required for properly ventilated areas. Respiratory protection should be considered for exposures resulting from unusual applications and/or used in non-ventilated enclosed areas. If this occurs, wear NIOSH/MSHA approved self-contained breathing apparatus or cartridge type respirator.

VENTILATION	LOCAL EXHAUST:	If needed	SPECIAL :	N/A
	MECHANICAL :	If needed	OTHER :	N/A

GLOVES: Chemical resistant, impervious **EYE PROTECTION:** Safety glasses

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Use a chemical apron to protect clothing if needed.

WORK/HYGIENIC PRACTICES:

Always wash hands after working with this material; use good hygiene practices.

SECTION X - REGULATORY INFORMATION

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

SARA Title III Information:

Section 313 - Toxic Chemicals: Pursuant to section 313 of SARA Title III, this product contains one or more toxic chemicals that are present in a concentration in excess of 1 percent of the mixture (0.1 percent, if the listed toxic chemical is a carcinogen). Toluene



MATERIAL SAFETY DATA SHEET

Schnee-Morehead[®], Inc.

SECTION XI - DISCLAIMER

This document may be used to comply with OSHA's Hazardous Communication Standard, 29 CFR 1910.1200.

A MSDS such as this cannot be expected to cover all possible individual situations. The end user of this product has the responsibility to provide a safe workplace. All aspects of an individual operation should be examined to determine if, or where, precautions – in addition to those described herein – are required. Any health and safety information contained herein should be passed on to your customers and/or employees.

The opinions expressed herein are those of qualified experts within Schnee-Morehead[®], Inc. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and the use of this product are not within the control of Schnee-Morehead[®], Inc., final determination of suitability of this product is the sole responsibility of the user. It is the responsibility of the user to comply with all applicable Federal, State and Local laws and regulations.

=====

N/A = Not Applicable, N.A. = Not Available, N.D. = Not Determined, N/E = Not established, UNK = Unknown