Ultra Clean II CR Ceiling System		
Proper Name	**Use within System**	**Name on General MSDS List**
Polyurethane adhesive	Panel adhesive	9500 polyurethane adhesive
Ultra Clean II Panel	Ceiling Panel	UCII Panel
BioCR Sealant A	Sealant (Part one of two)	BioCR A
BioCR Seant B	Sealant (Part two of two)	BioCR B

GridLock™ Ultra Clean II CR System
(walls and ceilings)

Product Description:

The GridLock™ Ultra Clean II CR Panel is an aggregate of components made of a polymer matrix reinforced with fibers composite laminated to a supporting media that form a durable composite panel. The exposed face is composed of .090 polymer matrix/fibers backed by a .120 fiber backing. The surface finish is glossy and smooth to touch with a slightly visible fiberglass print through and is ASTM E 84 Fire Rated. The panel is supplied in standard 4' x 8' or 4' x 10 'sizes each being .21" (7/16") thick.

The panel face is chemical resistant and can withstand high pressure wash down. The composite construction does not allow water infiltration making the panel moisture insensitive. Ultra Clean II CR is recommended to be installed directly over Gyp board or other hard board wall construction products. It is not recommended to be installed directly over studs. The Ultra Clean II CR panel is installed with a Clean Room Joint at the butt joint with 100% solids urethane sealant. Since the gel coat surface is integral to the surface it will not peel like normal paints therefore painting is not necessary. The Ultra Clean II panel systems greatly enhance the impact resistance and overall durability of standard panel construction and does not require subsequent painting.

GridLock™ panels are ideal for use in facilities where cleaning and disinfecting are critical. The surface is dense, stain resistant, chemical resistant and impervious to water. The panels will not rust or deteriorate from continued exposure to water and chemicals. GridLock™ Ultra Clean II CR panels can be used in food service, animal holding rooms, utility corridors and clean room applications.

Properties:

Finish:

Fire Rating: Class 1 ASTM E 84 for flame spread of 25 or less
Light Reflectance: LR-1, 0.75 or greater
Minimum Weight: 2.0 lbs. per square foot
Finish: Polyester gel coat
Standard Sizes: 4' X 8' and 4' x 10' (Panels can be cut to custom sizing if required)
Panel thickness: 5.3 mm
Color: White
Finish: Gloss

Cleaning: GridLock™ Ultra Clean II CR panels can withstand daily surface washing, wet wiping, dusting and vacuuming and can withstand high-pressure washing. The resinous finish will not support the growth of bacteria or mold. The surface may scratch if an abrasive cleaner or abrasive brush is used.

Sound Absorption: N/A

Installation: Prior to installation the area in consideration should be at operating conditions for temperature and relative humidity for at least 24 hours prior to and during installation to ensure proper fit and seal.

SAFETY DATA SHEET

Date Prepared: 5/15/2014 Date Modified: 00/00/0000 Date Printed: 12/8/2015

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

MATERIAL IDENTITY:
BIO/CR-B
Aspartic Ester

INFORMATION TELEPHONE:
800-638-9874

COMPANY:
Life Science Products, Inc.
124 Speer Road
Chestertown, MD 21620

EMERGENCY TELEPHONE:
CHEMTREC: 800-424-9300

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

OSHA HAZARDOUS

Skin, Eye and Respiratory Irritant, Skin Sensitizer

Target Organs: Eyes, Skin, Digestive Tract, Respiratory Tract

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health		Environmental		Physical
Acute Toxicity	Category 5	Acute Aquatic Hazard	Category 3	Not Classified
Skin Irritant	Category 2			
Eye Irritation	Category 2A			
Skin Sensitizer	Category 1			
STOT (Respiratory)	Category 3			

Pictogram:

Signal Word **Warning**

Hazard Statements	Precautionary Statements
H315 May be harmful if swallowed H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May Cause respiratory irritation H402 Harmful to aquatic life	P261 Avoid breathing dust/fume/gas/mist/vapours/ spray. P264 Wash thoroughly after handling. P280 Wear protective gloves/eye protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of containers in accordance with local/regional/national/international requirements.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
Aspartic Ester(s)	Proprietary	50 - 70 %
Aliphatic Carboxylic Ester	623-91-6	1 - 5%
Titanium Dioxide	13463-67-7	1 - 50%
Aldimine	54914-37-3	1 - 5%

4. FIRST AID MEASURES

Eyes Contact: Immediately flush eyes gently with large amounts of water for at least 20-30 minutes. Retract eyelids often. Get prompt medical attention. Symptoms of exposure may include pain or burning sensation, redness, swelling, tearing/discharge or blurred vision.

Skin Contact: Thoroughly wash the exposed area with mild soap and water. Remove contaminated clothing and launder contaminated clothing before re-use. Seek medical attention if exposure symptoms develop.

Symptoms may include irritation with reddening and itching. Repeated exposure may cause allergic skin reaction and sensitization of susceptible persons.

Ingestion: If large quantity is swallowed, give lukewarm water (2 cups) if victim is completely conscious/alert. Do not induce vomiting as risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention.

Inhalation: Inhalation is unlikely due to low vapor pressure. If misted or handled at elevated temperatures, high concentrations may cause respiratory tract irritation. If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

Advise to physicians: If exposed, treat skin and eye burns or irritation conventionally after decontamination. This material or its emissions may induce an allergic or sensitization reaction and thereby aggravate systemic disease.

5. FIRE FIGHTING MEASURES

Conditions of Flammability
At higher temperatures vapors can cause pressure build up in sealed containers. Use water to cool containers exposed to fire.

Suitable extinguishing media
Dry Chemical, CO2, Foam, Water spray/water fog for cooling.

Hazardous Decomposition Products
Fire and thermal decomposition can produce carbon oxides, nitrogen oxides (NOx) amines and other aliphatic fragments which have not been determined. Ammonia may be liberated at high temperatures.

Fire Fighting Instructions
Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray/fog for cooling. Notify authorities if liquid enters sewer/public waters.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions
Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air.

Methods and Materials for Containment and Cleaning Up
Extinguish all ignition sources and ventilate area. Wear protective equipment during clean up. Cover spills and soak up small spill with inert solids (such as vermiculite, clay) and sweep/shovel into vented disposal container. Wash spill area with a strong detergent and water solution; rinse with water but minimize water use during clean up. For spills on water, contain, minimize dispersion and collect. Dispose/report per regulatory requirements. Evacuate and keep unnecessary people out of the spill area. See Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Conditions for Safe Storage
Keep container closed when not in use. Store in a dry place away from excessive heat. The material can be stored safely at ambient temperatures. Minimum storage temperature 32 F (0 C) Maximum storage temperature 104 F (40 C). Material is hygroscopic and may absorb small amounts of atmospheric moisture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

HAZARDOUS COMPONENT	PEL	STEL	TLV	Other
Aspartic Ester (s)	NE	NE	NE	NE
Aliphatic Carboxylic Ester	NE	NE	NE	NE
Propylene Carbonate	NE	NE	NE	NE
Aldimine	NE	NE	NE	NE

Engineering Controls
Use local exhaust ventilation to maintain airborne concentrations below exposure limits. Respiratory protection may be required in addition to general room ventilation.

Respiratory Protections
No respiratory protection is recommended for working with this material. However if conditions such as in a spray application create a high vapor or mist concentration, use of a NIOSH/MSHA organic vapor/particulate approved respirator or supplied air is recommended.

Eye Protection
Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

Skin and Body Protection
When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene, rubber or latex. Clean equipment thoroughly after each use.

Other hygienic practices
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Form	Viscous Liquid
Color	Light Gray
pH	Not available
Melting/Freezing Temperature	< -20 C (<4 F)
Boiling Point	185C/365F @ 1.0133mbar)
Flash Point	> 93.3 C/200 F
Ignition Temperature	Not available
Autoignition Temperature	N/AP
Lower explosive limit; na	Upper explosive limit: na
Vapor Pressure	0.000014 mm Hg
Vapor Density (air=1)	>1
Specific Gravity (water=1 @39.2F)	AP 1.22 at 25 C/77F
Evaporation Rate (Bac=1)	None
Odor	Mild amine odor
Odor threshold	Not available

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Avoid extreme heat.

Materials to Avoid

Avoid contact with oxidizing agents.

Hazardous Decomposition Products

Fire and thermal decomposition can produce carbon oxides, nitrogen oxides (NOx) amines and other aliphatic fragments which have not been determined. Ammonia may be liberated at high temperatures.

11. TOXICOLOGY INFORMATION

Toxicity Data Based on DESMOPHEN NH 1520

Acute Toxicity

Oral LD50	Rat	> 200 mg/kg
Dermal LD50	Rat	> 2,000 mg/kg
Inhalation LC50	Rat	> 4,224 mg/m^3

Skin Corrosion/Irritation

Skin	Rabbit	Moderate skin Irritant

Serious Eye Damage/Eye Irritation

Eye	Rabbit	Non-irritating

Respiratory or Skin Sensitization

Dermal	Guinea Pig	Sensitizer

Mutagenicity

Genetic Toxicity in Vitro:
Ames test: negative (Salmonella typhimurium)

Toxicity Data Based on Aspartic Ester

Acute Toxicity

Oral LD50	Rat	> 2,000 mg/kg
Dermal LD50	Rat	> 2,000 mg/kg
Inhalation LC50	Rat	4,224 mg/m^3

Skin Corrosion/Irritation

Skin	Rabbit	Moderate skin Irritant

Serious Eye Damage/Eye Irritation

Eye	Rabbit	Non-irritating

Respiratory or Skin Sensitization

Dermal	Guinea Pig	Sensitizer

Mutagenicity

Genetic Toxicity in Vitro:
Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Toxicity Data Based on Aliphatic Carboxylic Ester

Acute Toxicity

Oral LD50	Rat	1,780 mg/kg

Carcinogenicity

IARC: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

NTP: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

12. ECOLOGICAL INFORMATION

Aquatic Ecotoxicity Desmophen NH1520

Toxicity to fish	LC50 Brachydanio rerio (Zebra fish) 66 mg/l – 96 h
Toxicity to aquatic invertebrates	EC50 Daphnia magna (water flea) 88.6 mg/l – 48 h
Toxicity to algae	EC50 Scenedemus subspicatus (Green Algae) 113 mg/l – 72 h
Toxicity to bacteria	EC50 3,000 mg/l

Biodegradability

13% Not readily biodegradable. Aerobic exposure time 28 d

Bioaccumulative potential

No data available

Mobility in soil

No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal

When a decision is made to discard this material as supplied, it does not meet RCRA's characteristics definition of ignitability, corrosiveness, or reactivity and is not listed in 40CFR261.33. The toxicity characteristic (TC), has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

14. TRANSPORTATION INFORMATION

DOT (US)

Not regulated by DOT

IMDG

Not regulated by IMDG

IATA

Not regulated by IATA

15. REGULATORY INFORMATION

TSCA INVENTORY STATUS

All components are listed or exempt

OSHA HAZARDS

Skin, Eye and Respiratory Irritant, Skin Sensitizer

	HMIS Classification	NFPA Rating
Health Hazard;	2	2
Flammability	1	1
Physical Hazards	0	0

SARA TITLE III: Section 311/312 Hazard Class

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations.

SARA TITLE III: Section 313 (40CFR370)

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations.

CERCLA Information (40CFR302.4)

This material contains no hazardous or extremely hazardous substances at or above the de minimus concentrations as defined by CERCLA or SARA Title III, and release is therefore not reportable.

California Proposition 65 Information:

This product does not contain, or may contain substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

16. OTHER INFORMATION

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss,

damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SAFETY DATA SHEET

Date Prepared: 5/14/2014 Date Modified: 00/00/0000 Date Printed: 12/8/2015

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

MATERIAL IDENTITY:
BIO/CR-A
Catalyst

INFORMATION TELEPHONE:
800-638-9874

COMPANY:
Life Science Products
124 Speer Road
Chestertown, MD 21620

EMERGENCY TELEPHONE:
CHEMTREC: 800-424-9300

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

OSHA HAZARDOUS

Skin sensitizer, Skin, Eye, Respiratory Irritant, Digestive Tract Irritant

Target Organs: Respiratory, Eyes, Skin, Digestive Tract

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health		Environmental	Physical
Eye Irritation	Category 2A	Not Classified	Not Classified
Respiratory Sensitization	Category 1		
Skin Sensitization	Category 1		

Pictogram:

Signal Word **Danger**

Hazard Statements	Precautionary Statements
H317 May cause an allergic skin reaction H319 Causes serious eye irritation H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled	P261 Avoid breathing dust/fume/gas/mist/vapours/ spray. P264 Wash thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/eye protection/face protection. P285 In case of inadequate ventilation wear respiratory protection. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333 + P313 If skin irritation or rash occurs get medical advice/ attention. P337 + P311 If eye irritation persists: Get medical advice/ attention. P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician P363 Wash contaminated clothing before reuse. P501 Dispose of containers in accordance with local/regional/national/international requirements.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
Hexane,1.6-diisocyanate, -Homopolymer	28182-81-2	100
Hexamethylene Diisocyanate (HDI)	822-06-0	< 0.5
Titaniumdioxide	13463-67-7	1%-50%

4. FIRST AID MEASURES

Eyes Contact: Immediately flush eyes gently with large amounts of water for at least 15 minutes. Retract eyelids often. Get prompt medical attention. Can cause pain, tearing, reddening, and swelling accompanied by a stinging sensation. Chronic exposure can cause corneal opacity.

Skin Contact: Thoroughly wash the exposed area with mild soap and water. Remove contaminated clothing and launder contaminated clothing before re-use. Seek medical attention if exposure symptoms develop.

May be harmful if absorbed through the skin. Symptoms of irritation may be reddening swelling, rash, scaling or blistering. May cause sensitization and allergic reaction.

Ingestion: If victim is conscious and alert, give 2 - 3 glasses of water to drink and induce vomiting by touching the back of the throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than the waist if vomiting occurs and the victim is conscious; give water to further dilute the chemical.

May be harmful if swallowed. Can cause irritation and possible corrosive action to the mouth, stomach tissue and digestive tract.

Inhalation: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention immediately. May cause shortness of breath, headache, nausea, vomiting, respiratory tract irritation.

Advise to physicians: All treatment should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Exposure may aggravate asthma and other respiratory disorders (bronchitis, emphysema, and hyperactivity) skin allergies and eczema.

5. FIRE FIGHTING MEASURES

Conditions of Flammability
Product will burn under fire conditions. Under fire conditions, toxic, corrosive fumes are emitted including nitrogen and carbon oxides. Use water to cool tightly closed containers exposed to fire. Self contained breathing apparatus and full protective clothing is required when smoke or fumes are generated.

Suitable extinguishing media
Dry Chemical, CO2, Foam, **WATER IS NOT** recommended.

Hazardous Decomposition Products
Thermal decomposition may produce nitrogen oxides and carbon oxides.

Fire Fighting Instructions
Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Use water spray/fog for cooling tightly sealed containers. Notify authorities if liquid enters sewer/public waters.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions
Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air. Prevent runoff from entering drains, sewers, or streams. Dispose/report per regulatory requirements. See Section 1 for emergency contact information and Section 13 for waste disposal.

Methods and Materials for Containment and Cleaning Up
Cover spills and soak up small spill with inert solids (such as vermiculite, clay) and sweep/shovel into disposal container. Pump free liquid into an appropriate closed container. Clean up spill area with a decontamination solution made up of 50% isopropanol, 45% water and 5% concentration ammonia solution (% by Weight). The solution should cover the area for at least one hour. Absorb with an inert absorbent. Collect washing for disposal. Dispose/report per regulatory requirements. **Do not** flush into drains.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Conditions for Safe Storage
This material is stable under normal handling and storage conditions. Maximum storage temperature is < 40 C (104 F). Store in a dry, well ventilated area. Store, transfer and handle under a blanket of nitrogen. Before closing partially empty containers, blanket with dry nitrogen. Replace damaged gaskets.

Store in tightly closed containers. Store in original container. Recommended container material: aluminum, epoxy coated steel, stainless steel, plastic. Container material to avoid, copper, tin.
.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

HAZARDOUS COMPONENT	PEL	STEL	TLV	Other
Hexane,1.6-diisocyanate, - Homopolymer	NE	NE	NE	NE
Hexamethylene Diisocyanate (HDI)	NE	NE	ACGIH 0.005 ppm	NE

Engineering Controls
Local exhaust ventilation may be required in addition to general room ventilation. Good industrial hygiene practice dictates that worker protection be achieved through ventilation whenever feasible.

Respiratory Protections
Where respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations. Full-face air purifying respirators are required in work environments where isocyanate airborne concentrations exceed the action level but are significantly lower than the IDLH provided that the cartridges are changed daily. Use combination HEPA Filter for the polyisocyanate aerosol and an organic vapor cartridge for the solvents used. Full face supplied air respirators (SAR) are required in work environments where isocyanate airborne concentrations have not been characterized or are expected to exhibit considerable and sudden variations such as in spray type application. Curing ovens must be ventilated to prevent emissions to the workplace.

Eye Protection
Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

Skin and Body Protection
When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene, rubber or latex. Clean equipment thoroughly after each use.

Other hygienic practices
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES
Precautions must be taken so that persons handling this product do not allow contact with eyes or skin. In spray operations protection must be afforded against exposure to both vapor and spray mists.

Use good personal hygiene practices. Do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is being used. Wash hands before eating, drinking, smoking or using toilet facilities. Wash exposed skin promptly to remove accidental splashes or contact with these materials. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Form	Viscous Liquid
Color	Pale yellow
pH	Not available
Melting/Freezing Temperature	67 C (152 F)
Boiling Point	255 C (491 F)
Flash Point	170 C/ 338 F
Ignition Temperature	Not available
Autoignition Temperature	454 C (849 F)
Lower explosive limit; na	Upper explosive limit: na
Vapor Pressure	0.001 mm Hg at 20 C
Vapor Density (air=1)	5.8 Air = 1
Specific Gravity (water=1 @39.2F)	1.13 at 20 C/68F
Evaporation Rate (Bac=1)	Not available
Odor	Odorless
Odor threshold	Not available

10. STABILITY AND REACTIVITY

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
Stable under normal processing conditions.

Conditions to Avoid
Reacts violently with common materials including water, alcohols, bases and amines.

Materials to Avoid
Store away from water, alcohols, bases, and amines.

Hazardous Decomposition Products
Thermal decomposition may produce nitrogen oxides and carbon oxides.

11. TOXICOLOGY INFORMATION

Acute Toxicity hexamethylene diisocyanate

Oral LD50 – lethal concentration 50% of test species	Rat	> 5,000 mg/kg
Dermal LD50 – lethal concentration 50% of test species	Rabbit	> 2,000 mg/kg
Inhalation LD50 – lethal concentration 50% of test species	Rat	2.18 mg/l – 4 hr

Skin Corrosion/Irritation

Skin Rabbit Slightly Irritating

Serious Eye Damage/Eye Irritation

Eye Rabbit Mildly Irritating

Respiratory or Skin Sensitization

Skin Guinea Pig Sensitizing

Mutagenicity

No data available

Carcinogenicity

IARC: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

NTP: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

12. ECOLOGICAL INFORMATION

Aquatic Ecotoxicity

No data available

Biodegradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal

When a decision is made to discard this material as supplied, it does not meet RCRA's characteristics definition of ignitability, corrosiveness, or reactivity and is not listed in 40CFR261.33. The toxicity characteristic (TC), has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

14. TRANSPORTATION INFORMATION

DOT (US)

Not regulated by DOT

IMDG

Not regulated by IMDG

IATA

Not regulated by IATA

15. REGULATORY INFORMATION

TSCA INVENTORY STATUS

All components are listed or exempt

OSHA HAZARDS

Skin Irritant, Skin Sensitizer, Eye Irritant, Respiratory Irritant, Digestive Tract Irritant

	HMIS Classification	NFPA Rating
Health Hazard;	2	2
Flammability	1	1
Physical Hazards	1	1

SARA TITLE III: Section 311/312 Hazard Class

	CERCLA/SARA RQ
Hexamethylene diisocyanate	100 lbs

SARA TITLE III: Section 313 (40CFR370)

	CERCLA/SARA RQ
Hexamethylene diisocyanate	100 lbs

CERCLA Information (40CFR302.4)

This material contains Hexamethylene diisocyanate and releases in excess of CERCLA thresholds are reportable.

California Proposition 65 Information:

This product does not contain, or may contain substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

16. OTHER INFORMATION

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

PREMIER BUILDING SOLUTIONS, INC..

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	**Emergency Telephone Number**
Premier Building Solutions, Inc. 480 Nova Drive Massillon, OH. 44646	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.

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

CAS Number	Wt %	Component Name
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.

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.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Component Exposure Limits

CAS Number	Component Name	Exposure Limits
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.

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.

10. STABILITY AND REACTITY

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

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)

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.

Work Place Hazardous Material Information Sysytems (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

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

Minnesota

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

New Jersey

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

Pennsylvania

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

Rhode Island

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

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 CONTAINSALL 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.

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