

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name: HYBRID PANEL BONDER (Hardener) #8422 and #8423  
 Date Printed: October 22, 2011  
 Product Use/Class: Structural Adhesive Hardener (USE WITH BASE)

Supplier: International Epoxies & Sealers  
 30241 Commerce Drive  
 San Antonio, FL 33576  
 Information Phone: 1-800-451-7206

Emergency Telephone: INFOTRAC 1-800-535-5053  
 Outside the U.S. Call collect: 1-352-323-3500

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredients	CAS #	%
FATTY ACIDS, DIMERS	68541-13-9	15 – 40
BUTADIENE ACRYLONITRILE COPOLYMER	68683-29-4	5 – 25
FUSED SILICA	60676-86-0	4 – 10
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	90-72-2	5 – 10
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GLYCOL	4246-51-9	2 – 8
BENZYL ALCOHOL	100-51-6	2 - 8
TRIETHYLENETETRAMINE	112-24-3	1 - 5
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	67762-90-7	1 - 5
AMINE EPOXY CURING AGENT	288-32-4	1 - 5
PHENOL, 4,4"-(1-METHYLETHYLIDENE)BIS-	80-05-7	1 - 5
N-AMINOETHYLPIPERAZINE	140-31-8	1 - 5
NONYLPHENOL	25154-52-3	1 – 5
BENZYLDIMETHYLAMINE	103-83-3	< 1
STODDARD SOLVENT	8052-41-3	<= 0.3
1-METHOXY-2-PROPANOL	108-65-6	<= 0.3
QUARTZ SILICA	14808-60-7	<= 0.03
BENZENE	71-43-2	<= 0.001

**3. HAZARDOUS IDENTIFICATION**

**Specific Physical Form:** Viscous liquid.  
**Odor, Color, Grade:** Tan liquid, slight amine odor.  
**General Physical Form:** Liquid  
**Immediate health, physical, and environmental hazards:** May cause chemical eye burns. May cause allergic skin reaction. May cause chemical skin burns. May cause chemical gastrointestinal burns. Contains a chemical or chemicals which can cause birth defects or other reproductive harm. Contains a chemical or chemicals which can cause cancer.

**POTENTIAL HEALTH EFFECTS**

**Eye Contact:** Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.  
**Skin Contact:** Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.  
**Inhalation:** Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.  
**Ingestion:** Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.  
**Target Organ Effects:** Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

**Carcinogenicity:**  
 Contains a chemical or chemicals which can cause cancer.

Ingredient	C.A.S. No.	Class Description	Regulation
BENZENE	71-43-2	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
BENZENE	71-43-2	Known human carcinogen	National Toxicology Program Carcinogens
BENZENE	71-43-2	Cancer hazard	OSHA Carcinogens
QUARTZ SILICA	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
QUARTZ SILICA	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens

#### 4. FIRST AID MEASURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water for at least 15 minutes. Get immediate medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. Get immediate medical attention.

**If Swallowed:** Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

#### 5. FIRE FIGHTING MEASURES

##### 5.1 FLAMMABLE PROPERTIES

**Autoignition temperature** *No Data Available*

**Flash Point** >93 °C (200°F) [*Test Method: Closed Cup*]

**Flammable Limits - LEL** *No Data Available*

**Flammable Limits - UEL** *No Data Available*

**OSHA Flammability Classification:** Class IIIB Combustible Liquid

##### 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

##### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA). Water or foam may cause frothing.

**Unusual Fire and Explosion Hazards:** No unusual fire or explosion hazards are anticipated.

**Note:** See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Accidental Release Measures:

Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Read and follow safety precautions on the solvent label and MSDS.

Dispose of collected material as soon as possible.

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

Contain spill. Collect as much of the spilled material as possible. Clean up residue with an appropriate organic solvent.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

#### 7. HANDLING AND STORAGE

##### 7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

Contents may be under pressure, open carefully. Avoid breathing of vapors, mists or spray. Avoid skin contact. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Avoid breathing of dust created by cutting, sanding, grinding or machining. Avoid contact with oxidizing agents.

##### 7.2 STORAGE

Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents.

#### 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

##### 8.1 ENGINEERING CONTROLS

If exhaust ventilation is not available, use appropriate respiratory protection. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

##### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

###### 8.2.1 Eye/Face Protection

Avoid eye contact. Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Full Face Shield

Safety Glasses with side shields

Indirect Vented Goggles

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## 8.2.2 Skin Protection

Avoid skin contact. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Neoprene or Nitrile Rubber

## 8.2.3 Respiratory Protection

Avoid breathing of vapors. Avoid breathing of dust created by cutting, sanding, grinding or machining.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with P95 particulate filters.

## 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest. Wash hands after handling and before eating.

## 8.3 EXPOSURE GUIDELINES

Ingredient	Authority	Type	Limit	Additional Information
BENZENE	ACGIH	TWA	0.5 ppm	Skin Notation*
BENZENE	ACGIH	STEL	2.5 ppm	Skin Notation*
BENZENE	OSHA	TWA	1 ppm	29 CFR 1910.1028
BENZENE	OSHA	STEL	5 ppm	29 CFR 1910.1028
BENZENE	OSHA	TWA	10 ppm	
BENZENE	OSHA	CEIL	25 ppm	
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	CMRG	CEIL	5 mg/m3	
QUARTZ SILICA	ACGIH	TWA, respirable fraction	0.025 mg/m3	
QUARTZ SILICA	OSHA	TWA concentration, respirable	0.1 mg/m3	
QUARTZ SILICA	OSHA	TWA concentration, as total dust	0.3 mg/m3	
STODDARD SOLVENT	ACGIH	TWA	100 ppm	
STODDARD SOLVENT	OSHA	TWA	500 ppm	
1-METHOXY-2-PROPANOL ACETATE	US AIHA	TWA	50 ppm	
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	CMRG	TWA	5 ppm	

\* Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

### SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Viscous liquid.
Odor, Color, Grade:	Tan liquid, slight amine odor.
General Physical Form:	Liquid
Autoignition temperature	No Data Available
Flash Point	>93 °C (200°F) [Test Method: Closed Cup]
Flammable Limits - LEL	No Data Available
Flammable Limits - UEL	No Data Available
Boiling point	>=110 °C
Density	8.94 lb/gal
Vapor Density	No Data Available
Vapor Pressure	No Data Available
Specific Gravity	Approximately 1.07 [Ref Std: WATER=1]
pH	Not Applicable
Melting point	Not Applicable
Solubility In Water	No Data Available
Solubility in Water	Negligible
Evaporation rate	< 1
Volatile Organic Compounds	No Data Available
Kow - Oct/Water partition coef	No Data Available
Percent volatile	Negligible
Viscosity	> 400 centistoke

**10. STABILITY AND REACTIVITY**

**Stability:** Stable.  
**Materials and Conditions to Avoid:**  
**10.1 Conditions to avoid**  
None known  
**10.2 Materials to avoid**  
Strong oxidizing agents  
**Hazardous Polymerization:** Hazardous polymerization will not occur.

**Hazardous Decomposition or By-Products**

Substance	Condition
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

**11. TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

**12. ECOLOGICAL INFORMATION**

**ECOTOXICOLOGICAL INFORMATION** - Not determined.  
**CHEMICAL FATE INFORMATION** - Not determined.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Dispose of completely cured (or polymerized) wastes in a sanitary landfill. Incinerate uncured product in a permitted hazardous waste incinerator in the presence of a combustible material. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.  
**EPA Hazardous Waste Number (RCRA):** D002 (Corrosive)  
**Since regulations vary, consult applicable regulations or authorities before disposal.**

**14. TRANSPORTATION INFORMATION**

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

U.S. Dept. of Transportation Ground (49 CFR):  
Proper Shipping Name: Not Regulated  
Hazard Class or Division: None  
Identification Number: None  
Packaging Group: None

International Air Transportation (ICAO/IATA):  
Proper Shipping Name: Not Regulated  
Hazard Class or Division: None  
Identification Number: None  
Packaging Group: None

Water Transportation (IMO/IMDG):  
Proper Shipping Name: Not Regulated  
Hazard Class or Division: None  
Identification Number: None  
Packaging Group: None  
Marine Pollutant: None

**15. REGULATORY INFORMATION**

**US FEDERAL REGULATIONS**

**TSCA Status:** All known major components of this product are listed on the TSCA Inventory and/or are otherwise in compliance with TSCA.  
**311/312 Hazard Categories:** - Immediate Hazard – Yes, Delayed Hazard – Yes, Reactivity Hazard – Yes  
**SARA 313 Status:** \*\*\* No toxic chemical(s) subject to reporting requirements of section 313 of Title III and of 40 CFR 372 are present.  
**OSHA Status:** This material meets the requirements of hazardous material and is subject to 29CFR1910.1200.

# MATERIAL SAFETY DATA SHEET

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## STATE REGULATIONS

### Massachusetts Right to Know Components

Stoddard Solvent C.A.S. # 8052-41-3

### Pennsylvania Right to Know Components

Stoddard Solvent C.A.S. # 8052-41-3

1-Methoxy-2-propanol acetate C.A.S. # 108-65-6

### New Jersey Right to Know Components

Stoddard Solvent C.A.S. # 8052-41-3

1-Methoxy-2-propanol acetate C.A.S. # 108-65-6

## CALIFORNIA PROPOSITION 65

Ingredient	C.A.S. No.	Classification
BENZENE	71-43-2	*Male reproductive toxin
BENZENE	71-43-2	**Carcinogen
BENZENE	71-43-2	*Developmental Toxin
QUARTZ SILICA	14808-60-7	**Carcinogen PARTICLES OF RESPIRABLE SIZE)

Contains trace concentrations of Benzene

\* WARNING: contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

## CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this product are listed on the Australian Inventory of Chemical Substances.

The components of this product are listed on the Canadian Domestic Substances List.

WHMIS: Hazardous

## 16. OTHER INFORMATION

### NFPA Hazard Classification

**Health: 3 Flammability: 1 Reactivity: 0 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Prepared by: Technical Manager

DISCLAIMER: Some of the information presented is from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed 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 MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS may not be applicable.

**END OF MSDS**

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name: HYBRID PANEL BONDER (RESIN BASE) #8422 and #8423  
 Date Printed: October 22, 2011  
 Product Use/Class: Structural Adhesive RESIN BASE (USE WITH HARDENER)  
 Supplier: International Epoxies & Sealers  
 30241 Commerce Drive  
 San Antonio, FL 33576  
 Information Phone: 1-800-451-7206  
 Emergency Telephone: INFOTRAC 1-800-535-5053  
 Outside the U.S. Call collect: 1-352-323-3500

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredients	CAS #	%
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER	25068-38-6	30 – 60
ALKYL PHENOL BLOCKED POLYISOCYANATE	Trade Secret	5 – 20
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	14228-73-0	7 - 13
FUSED SILICA	60676-86-0	1 - 10
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	67762-90-7	1 - 10
GLASS BEADS	65997-17-3	1 - 5
3-(TRIMETHOXYSIYL)PROPYL GLYCIDYL ETHER	2530-83-8	0.5 - 1.5
PHENOL, NONYL-,BRANCHED	84852-15-3	0.1 - 1.5
CARBON BLACK	1333-86-4	<= 0.47
QUARTZ SILICA	14808-60-7	<= 0.01192

**3. HAZARDOUS IDENTIFICATION**

**Specific Physical Form:** Viscous  
**Odor, Color, Grade:** Black, viscous liquid.  
**General Physical Form:** Liquid  
**Immediate health, physical, and environmental hazards:** May cause allergic skin reaction. Contains a chemical or chemicals which can cause cancer.

**POTENTIAL HEALTH EFFECTS**

**Eye Contact:**  
 Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.  
**Skin Contact:**  
 Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.  
 Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.  
**Inhalation:**  
 Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.  
**Ingestion:**  
 Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.  
**Carcinogenicity:**  
 Contains a chemical or chemicals which can cause cancer.

Ingredient	C.A.S. No.	Class Description	Regulation
CARBON BLACK	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
QUARTZ SILICA	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
QUARTZ SILICA	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens

**4. FIRST AID MEASURES**

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.  
**Eye Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.  
**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.  
**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.  
**If Swallowed:** Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

## 5. FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

**Autoignition temperature** No Data Available

**Flash Point** > 104 °C [Test Method: Closed Cup]

**Flammable Limits - LEL** No Data Available

**Flammable Limits - UEL** No Data Available

**OSHA Flammability Classification:** Class IIIB Combustible Liquid

### 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA). Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

**Unusual Fire and Explosion Hazards:** Non-flammable: ordinary combustible material.

**Note:** See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

## 6. ACCIDENTAL RELEASE MEASURES

### Accidental Release Measures:

Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

Collect the resulting residue containing solution. Dispose of collected material as soon as possible.

Observe precautions from other sections. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with water.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

## 7. HANDLING AND STORAGE

### 7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid breathing of vapors, mists or spray. Avoid skin contact. Keep out of the reach of children. Avoid breathing of dust created by cutting, sanding, grinding or machining. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

### 7.2 STORAGE

Store away from heat. Keep container tightly closed.

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

If exhaust ventilation is not available, use appropriate respiratory protection. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control dust, fume, or airborne particles. If ventilation is not adequate, use respiratory protection equipment.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact.

The following eye protection(s) are recommended: Safety Glasses with side shields

Indirect Vented Goggles

#### 8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Neoprene or Nitrile Rubber

#### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with P95 particulate filters

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## 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

## 8.3 EXPOSURE GUIDELINES

Ingredient	Authority	Type	Limit	Additional Information
3-(TRIMETHOXSILYL)PROPYL GLYCIDYL ETHER	CMRG	TWA	5 ppm	
ALLYL GLYCIDYL ETHER	ACGIH	TWA	1 ppm	
ALLYL GLYCIDYL ETHER	OSHA	CEIL	45 mg/m3	
CARBON BLACK	ACGIH	TWA	3.5 mg/m3	
CARBON BLACK	CMRG	TWA	0.5 mg/m3	
CARBON BLACK	OSHA	TWA	3.5 mg/m3	
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	CMRG	CEIL	5 mg/m3	
QUARTZ SILICA	ACGIH	TWA, respirable fraction	0.025 mg/m3	
QUARTZ SILICA	OSHA	TWA concentration, respirable	0.1 mg/m3	
QUARTZ SILICA	OSHA	TWA concentration, as total dust	0.3 mg/m3	
SILICA	CMRG	TWA, as respirable dust	3 mg/m3	

## SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Specific Physical Form:</b>	Viscous
<b>Odor, Color, Grade:</b>	Black, viscous liquid.
<b>General Physical Form:</b>	Liquid
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	> 104 °C [ <i>Test Method: Closed Cup</i> ]
<b>Flammable Limits - LEL</b>	<i>No Data Available</i>
<b>Flammable Limits - UEL</b>	<i>No Data Available</i>
<b>Boiling point</b>	>=35 °C
<b>Density</b>	9.9 lb/gal
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	< 5 mmHg [ <i>@ 20 °C</i> ]
<b>Specific Gravity</b>	Approximately 1.19 [ <i>Ref Std: WATER=1</i> ]
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Solubility In Water</b>	<i>No Data Available</i>
<b>Solubility in Water</b>	Negligible
<b>Evaporation rate</b>	< 1 [ <i>Ref Std: BUOAC=1</i> ]
<b>Volatile Organic Compounds</b>	<i>No Data Available</i>
<b>Kow - Oct/Water partition coef</b>	<i>No Data Available</i>
<b>Percent volatile</b>	Negligible
<b>Viscosity</b>	> 400 centistoke

## 10. STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:**

**10.1 Conditions to avoid**

Sparks and/or flames

**10.2 Materials to avoid**

None known

**Hazardous Polymerization:** Hazardous polymerization will not occur.

## Hazardous Decomposition or By-Products

Substance	Condition
Aldehydes	Not Specified
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

**11. TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

**12. ECOLOGICAL INFORMATION**

**ECOTOXICOLOGICAL INFORMATION** - Not determined.  
**CHEMICAL FATE INFORMATION** - Not determined.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Dispose of completely cured (or polymerized) wastes in a sanitary landfill. As a disposal alternative, dispose of waste product in a permitted chemical waste facility.  
**EPA Hazardous Waste Number (RCRA):** not regulated  
**Since regulations vary, consult applicable regulations or authorities before disposal.**

**14. TRANSPORTATION INFORMATION**

U.S. Dept. of Transportation Ground (49 CFR):  
 Proper Shipping Name: Not Regulated  
 Hazard Class or Division: None  
 Identification Number: None  
 Packaging Group: None

International Air Transportation (ICAO/IATA):  
 Proper Shipping Name: Not Regulated  
 Hazard Class or Division: None  
 Identification Number: None  
 Packaging Group: None

Water Transportation (IMO/IMDG):  
 Proper Shipping Name: Not Regulated  
 Hazard Class or Division: None  
 Identification Number: None  
 Packaging Group: None  
 Marine Pollutant: None

**15. REGULATORY INFORMATION**

**US FEDERAL REGULATION**

**311/312 Hazard Categories:**

Fire Hazard - No Pressure Hazard - No    Reactivity Hazard - No    Immediate Hazard - Yes    Delayed Hazard – Yes

**STATE REGULATIONS**

**Massachusetts Right to Know Components**

Stoddard Solvent                      C.A.S. # 8052-41-3

**Pennsylvania Right to Know Components**

Stoddard Solvent                      C.A.S. # 8052-41-3  
 1-Methoxy-2-propanol acetate    C.A.S. # 108-65-6

**New Jersey Right to Know Components**

Stoddard Solvent                      C.A.S. # 8052-41-3  
 1-Methoxy-2-propanol acetate    C.A.S. # 108-65-6

**CALIFORNIA PROPOSITION 65**

Ingredient	C.A.S. No.	Classification
Benzene	71-43-2	*Male reproductive toxin
Benzene	71-43-2	**Carcinogen
Benzene	71-43-2	*Developmental Toxin
Quartz Silica	14808-60-7	**Carcinogen
Carbon Black	1333-86-4	**Carcinogen

\* WARNING: contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**CHEMICAL INVENTORIES**

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this product are listed on the Australian Inventory of Chemical Substances.

The components of this product are listed on the Canadian Domestic Substances List.

**INTERNATIONAL REGULATIONS**

**WHMIS:** Hazardous

**16. OTHER INFORMATION****NFPA Hazard Classification**

**Health: 3 Flammability: 1 Reactivity: 0 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Prepared by: Technical Manager

**DISCLAIMER:** Some of the information presented is from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed 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 MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS may not be applicable.

**END OF MSDS**