



MSDS Name SMC/FRP Fiberglass Repair and Panel Bonding-Urethane
Manufacturer Name Saint-Gobain Abrasives, Inc.
Stock No. 04673
Kit MSDS Revision Date 07/01/2013

Components	
	SMC/FRP Fiberglass Repair and Panel Bonding-Urethane (Part 1)
	SMC/FRP Fiberglass Repair and Panel Bonding-Urethane (Part 2)
Saint-Gobain Abrasives, Inc. Product Code : 04673	

SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name: SMC/FRP Fiberglass Repair and Panel Bonding-Urethane (Part 1)
Product Code: 04673A
MSDS Manufacturer Number: 04673A
Synonyms: 35 minutes (400mL)
Manufacturer Name: Saint-Gobain Abrasives, Inc.
Address: 1 New Bond Street
Worcester, MA 01615
General Phone Number: 508-795-5000
Emergency Phone Number: 508-795-5000
Website: www.Nortonabrasives.com
MSDS Creation Date: 10/12/2010
MSDS Revision Date: 07/01/2013

HMIS	
Health Hazard	
Fire Hazard	
Reactivity	
Personal Protection	1

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Talc	14807-96-6	7 - 13 by weight
Calcium Sodium aluminosilicate	1344-01-0	7 - 13 by weight
4,4 DiPhenylmeth.DiIsocyanate	101-68-8	30 - 60 by weight
Amorphous silica	68611-44-9	3 - 7 by weight
Benzene, 1,1'-methylenebis[4-i	25686-28-6	10 - 20 by weight

SECTION 3 : HAZARDS IDENTIFICATION

Emergency Overview: WARNING! Potential Sensitizer. Irritant.
Route of Exposure: Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:
Eye: Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury..

Skin:	Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.
Inhalation:	Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects. May cause respiratory sensitization with asthma-like symptoms in susceptible individuals.
Ingestion:	Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

SECTION 4 : FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
Skin Contact:	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 : FIRE FIGHTING MEASURES

Flash Point:	200 °F (93.3 °C)
Flash Point Method:	SETA
Auto Ignition Temperature:	Not determined.
Lower Flammable/Explosive Limit:	Not determined.
Upper Flammable/Explosive Limit:	Not determined.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media:	Use foam, fog spray, carbon dioxide (CO ₂) or dry chemical when fighting fires involving this material.
Unsuitable Media:	Water or foam may cause frothing which can be violent and possibly endanger the life of the firefighter. Water may be used to keep fire-exposed containers cool until fire is out.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Spill Cleanup Measures:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in section 8.
Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Other Precautions:	Pump or shovel to storage/salvage vessels.

SECTION 7 : HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use.
Special Handling Procedures:	Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.
Hygiene Practices:	Wash thoroughly after handling.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

EXPOSURE GUIDELINES

Talc:

Guideline ACGIH:	2 mg/m ³ TLV-TWA: 1 mg/m ³ Respirable fraction (R) TLV-TWA: 2 mg/m ³ Respirable fraction (R)
Guideline OSHA:	20 mppcf PEL-TWA: 20 mppcf

4,4 DiPhenylmeth.DiIsocyanate:

Guideline ACGIH:	0.005 ppm TLV-TWA: 0.005 ppm
Guideline OSHA:	PEL-Ceiling/Peak: 0.02 ppm

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Boiling Point:	410 °F (210 °C)
Melting Point:	Not determined.
Specific Gravity:	1.288
Solubility:	Insoluble in water.
Vapor Density:	Not determined.
Evaporation Rate:	Slower than ethyl ether.
Flash Point:	200 °F (93.3 °C)
Flash Point Method:	SETA
Auto Ignition Temperature:	Not determined.
VOC Content:	0.00 g/l 0.00 lbs/gal

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Reactivity:	High temperatures may cause thermal decomposition.
Hazardous Polymerization:	Not reported.
Conditions to Avoid:	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions.
Incompatible Materials:	Strong oxidizing agents, strong alkalis, strong mineral acids and water.
Special Decomposition Products:	By fire: May form carbon dioxide and carbon monoxide, hydrogen cyanide, nitrogen compounds and various hydrocarbons.

SECTION 11 : TOXICOLOGICAL INFORMATION

RTECS Number:	WW2710000
<u>4,4 DiPhenylmeth.DiIsocyanate:</u>	
RTECS Number:	NQ9350000
Eye:	Eye - Rabbit Standard Draize test.: 100 mg
Skin:	Oral - Rat LD50: 9200 mg/kg [Behavioral - Somnolence (general depressed activity) Behavioral - Ataxia Nutritional and Gross Metabolic - Body temperature decrease] Oral - Mouse LD50: 2200 mg/kg [Details of toxic effects not reported other than lethal dose value]
Inhalation:	Inhalation - Rat LC50: 178 mg/m ³ [Details of toxic effects not reported other than lethal dose value]
Ingestion:	Oral - Rat LD50: 9200 mg/kg [Behavioral - Somnolence (general depressed activity) Behavioral - Ataxia Nutritional and Gross Metabolic - Body temperature decrease] Oral - Mouse LD50: 2200 mg/kg [Details of toxic effects not reported other than lethal dose value]
Notes :	Individuals with breathing problems or that have had a prior reaction to isocyanates must not be exposed to this product.

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.
RCRA Number:	None.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Non regulated.
DOT UN Number:	Non regulated.
IATA Shipping Name:	Non regulated.
IATA UN Number:	Non regulated.

SECTION 15 : REGULATORY INFORMATION

Talc:

TSCA Inventory Status: Listed

Canada DSL: Listed

4,4 DiPhenylmeth.DiIsocyanate :

TSCA Inventory Status: Listed

SARA: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

Canada DSL: Listed

EC Number: 615-005-00-9

SECTION 16 : ADDITIONAL INFORMATION

HMIS Personal Protection: 1

MSDS Creation Date: 10/12/2010

MSDS Revision Date: 07/01/2013

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SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name: SMC/FRP Fiberglass Repair and Panel Bonding-Urethane (Part 2)

Product Code: 04673B

MSDS Manufacturer Number: 04673B

Synonyms: 35 minutes (400mL)

Manufacturer Name: Saint-Gobain Abrasives, Inc.

Address: 1 New Bond Street
Worcester, MA 01615

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HMIS

Health Hazard	
Fire Hazard	
Reactivity	
Personal Protection	1

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Polyether Polyol	9082-00-2	15 - 40 by weight
Talc	14807-96-6	10 - 30 by weight
Magnesium Lithium Silicate (Clay)	71011-26-2	1 - 5 by weight
Amorphous Silica	68909-20-6	1 - 5 by weight
Piperazine	110-85-0	0.5 - 1.5 by weight

SECTION 3 : HAZARDS IDENTIFICATION

Emergency Overview:	WARNING! Potential Sensitizer. Irritant.
Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	
Eye:	Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury..
Skin:	Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.
Inhalation:	Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects. May cause respiratory sensitization with asthma-like symptoms in susceptible individuals.
Ingestion:	Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

SECTION 4 : FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
Skin Contact:	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 : FIRE FIGHTING MEASURES

Flash Point:	200 °F (93.3 °C)
Flash Point Method:	SETA
Auto Ignition Temperature:	Not determined.
Lower Flammable/Explosive Limit:	Not determined.
Upper Flammable/Explosive Limit:	Not determined.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media:	Use foam, fog spray, carbon dioxide (CO ₂) or dry chemical when fighting fires involving this material.
Unsuitable Media:	Water or foam may cause frothing which can be violent and endanger the life of the firefighter. Water may be used to keep fire-exposed containers cool until fire is out.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Spill Cleanup Measures:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue.
Personnel Precautions:	Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in section 8.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Other Precautions:	Pump or shovel to storage/salvage vessels.

SECTION 7 : HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use.
Special Handling Procedures:	Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.
Hygiene Practices:	Wash thoroughly after handling.
Notes :	Intentional misuse by deliberately concentrating and inhaling vapours can be harmful or fatal.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

EXPOSURE GUIDELINES

Talc:

Guideline ACGIH: 2 mg/m³
 TLV-TWA: 1 mg/m³ Respirable fraction (R)
 TLV-TWA: 2 mg/m³ Respirable fraction (R)

Guideline OSHA: 20 mppcf
 PEL-TWA: 20 mppcf

Crystalline Silica, Quartz:

Guideline ACGIH: TLV-TWA: 0.025 mg/m³ (Respirable)
Guideline OSHA: PEL-TWA: [30 mg/m³]/{% SiO₂} + 2] - Total dust
 [10 mg/m³]/{% SiO₂} + 2] - Respirable dust

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Boiling Point:	410 Deg F (210 Deg C)
Melting Point:	Not determined.
Specific Gravity:	1.225
Solubility:	Insoluble in water.
Evaporation Rate:	Slower than ethyl ether.
Flash Point:	200 °F (93.3 °C)
Flash Point Method:	SETA
Auto Ignition Temperature:	Not determined.
VOC Content:	0.00 g/l 0.00 lbs/gal

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Reactivity:	High temperatures may cause thermal decomposition.
Hazardous Polymerization:	Not reported.
Conditions to Avoid:	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions.
Incompatible Materials:	Avoid contact with strong alkalis, strong mineral acids, strong oxidizing agents.
Special Decomposition Products:	By fire: May form carbon dioxide and carbon monoxide, nitrogen compounds, various hydrocarbons.

SECTION 11 : TOXICOLOGICAL INFORMATION

RTECS Number:	WW2710000
<u>Crystalline Silica, Quartz:</u>	
RTECS Number:	VV7330000
Inhalation:	Inhalation - Rat TCLo: 200 mg/kg; Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) Lungs, Thorax, or Respiration - Other changes Nutritional and Gross Metabolic - Changes in iron (RTECS)
Ingestion:	Oral - Rodent rat TDLo - Lowest published toxic dose: 120 gm/kg - [Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes] (RTECS)
Notes :	Individuals with breathing problems or that have had a prior reaction to isocyanates must not be exposed to this product.

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.
RCRA Number:	None.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Non regulated.
DOT UN Number:	Non regulated.
IATA Shipping Name:	Non regulated.
IATA UN Number:	Non regulated.

SECTION 15 : REGULATORY INFORMATION

Talc:

TSCA Inventory Status:	Listed
Canada DSL:	Listed

Crystalline Silica, Quartz :

TSCA Inventory Status:	Listed
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SARA:

California PROP 65:	The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains a chemical known to the State of California to cause cancer.
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Canada DSL:	Listed
EC Number:	238-878-4

SECTION 16 : ADDITIONAL INFORMATION

HMIS Personal Protection:	1
MSDS Creation Date:	10/12/2010
MSDS Revision Date:	07/01/2013

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