

(M)SDS Format : ANSI

423-001



MSDS Name **Structural Adhesive - Urethane (1 minute)**
 Manufacturer Name **Saint-Gobain Abrasives, Inc.**
 Stock No. **04615**
 Kit MSDS Revision Date **07/01/2013**

Components	
	Structural Adhesive - Urethane (1 minute) Part 1.
	Structural Adhesive - Urethane (1 minute) Part 2
Saint-Gobain Abrasives, Inc. Product Code : 04615	

SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

		NFPA
Product Name.	Structural Adhesive - Urethane (1 minute) Part 1	2 1
Product Code	04615A	
MSDS Manufacturer Number	04615A	
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	08/09/2010	
MSDS Revision Date	07/01/2013	
		HMIS
		Health Hazard 2
		Fire Hazard 1
		Reactivity 1
		Personal Protection 1
		* Chronic Health Effects

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Talc (no asbestos)	14807-96-6	5 - 10 by weight
4,4 DIPhenylmeth.DIIsocyanate	101-68-8	30 - 40 by weight
Colloidal Silica	68611-44-9	3 - 7 by weight
Urethane Prepolymer	Trade secret	20 - 30 by weight
MDI Homopolymer	25686-28-6	10 - 15 by weight
Aluminum oxide	1344-28-1	1 - 3 by weight
Sodium oxide	1333-59-3	1 - 3 by weight

Silicon dioxide	7631-86-9	1 - 5 by weight
Calcium monoxide	1305-78-8	1 - 3 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 carbon dioxide (CO2) or dry chemical when fighting fires involving this material.
Unsuitable Media:	Water or foam may cause frothing
Protective Equipment	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear

NFPA Ratings:

NFPA Flammability	1
NFPA Health	2
NFPA Reactivity	1

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
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	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 (no asbestos):

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

Aluminum oxide:

Guideline ACGIH	TLV-TWA: 10 mg/m ³
Guideline OSHA	PEL-TWA: 5 mg/m ³ Respirable fraction (R) PEL-TWA: 15 mg/m ³ Total particulate/dust (T)

Calcium monoxide:

Guideline ACGIH	TLV-TWA: 2 mg/m ³
Guideline OSHA.	PEL-TWA 5 mg/m ³

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Color	No Data
Odor	No Data
Boiling Point	Not determined.
Melting Point	Not determined
Specific Gravity	1.288 @70 °F
Vapor Pressure	<0.010 mmHg @ 77 °F
Percent Volatile:	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	Not determined.

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability	Stable under normal temperatures and pressures
Hazardous Polymerization	Not reported.
Conditions to Avoid	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions
Incompatible Materials	Oxidizers, acids, and chlorinated organic compounds. Reactive metals (e.g. sodium, calcium, zinc). Sodium/calcium hypochlorite. Nitrous acid/ oxide, nitrites Peroxides. Materials reactive with hydroxyl compounds.

SECTION 11 : TOXICOLOGICAL INFORMATION

RTECS Number	WW2710000
<u>4,4-Diphenylmethylenediisocyanate:</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/m3 [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]
<u>Aluminum oxide:</u>	
RTECS Number	BD1200000
Inhalation	Inhalation - Rat TCLo: 200 mg/m3/5H/28W (Intermittent) [Lungs, Thorax, or Respiration - Structural or functional change in trachea or bronchi; Lungs, Thorax, or Respiration - Chronic pulmonary edema; Related to Chronic Data - death] (RTECS)
RTECS Number	EW3100000

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
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RCRA Number: guidelines.
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 (no asbestos) :

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

Aluminum oxide :

TSCA Inventory Status: Listed
Canada DSL: Listed
EC Number: 215-691-6

Calcium monoxide :

TSCA Inventory Status: Listed
Canada DSL: Listed
EC Number: 215-138-9
Canada WHMIS: WHMIS Hazard Class(es): D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

SECTION 16 : ADDITIONAL INFORMATION

HMIS Fire Hazard: 1
HMIS Health Hazard: 2
HMIS Reactivity: 1
HMIS Personal Protection: 1
MSDS Creation Date: 08/09/2010
MSDS Revision Date: 07/01/2013

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UPC Number = 63642504615

SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Structural Adhesive - Urethane (1 minute) Part 2**
Product Code: 04615B
MSDS Manufacturer Number: 04615B
Manufacturer Name: Saint-Gobain Abrasives, Inc.
Address: 1 New Bond Street

NFPA

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HMIS

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Worcester, MA 01615
 General Phone Number 508-795-5000
 Emergency Phone Number 508-795-5000
 Website www.Nortonabrasives.com
 MSDS Creation Date 08/09/2010
 MSDS Revision Date 07/01/2013

Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	1

* Chronic Health Effects

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Urethane prepolymer	Proprietary	5 - 15 by weight
Polyether Polyol	Not Available	30 - 40 by weight
Talc	14807-96-6	20 - 30 by weight
Oxirane, methyl-, polymer with	9082-00-2	18 - 21 by weight
Amorphous silica	68909-20-6	1 - 5 by weight
Clay	71011-26-2	1 - 3 by weight
Carbon black	1333-86-4	0.1 - 1.0 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 carbon dioxide (CO2) or dry chemical when fighting fires involving this material.
Unsuitable Media	Water or foam may cause frothing.
Protective Equipment	As In any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Ratings:

NFPA Flammability	1
NFPA Health	1
NFPA Reactivity	0

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

Carbon black:

Guideline ACGIH	3.5 mg/m ³ TLV-TWA: 3.5 mg/m ³
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SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Color	Black.
Odor	No Data
Boiling Point	Not determined.
Melting Point	Not determined.
Specific Gravity	1.288 @77 °F
Vapor Pressure	Not determined.
Percent Volatile	Not determined.
Evaporation Rate	Not determined.
Flash Point	200 °F (93.3 °C)
Flash Point Method	SETA
Auto Ignition Temperature	Not determined.
VOC Content	Not determined.

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability	Stable under normal temperatures and pressures.
Hazardous Polymerization	Not reported.
Conditions to Avoid	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions
Incompatible Materials	Oxidizers, acids, and chlorinated organic compounds. Reactive metals (e.g. sodium, calcium, zinc). Sodium/calcium hypochlorite. Nitrous acid/oxide, nitrites. Peroxides. Materials reactive with hydroxyl compounds

SECTION 11 : TOXICOLOGICAL INFORMATION

RTECS Number	WW2710000
<u>Oxirane, methyl-, polymer with:</u>	
RTECS Number	TQ8180000
Skin	Oral - Rat LD50 . >10 gm/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit LD50 . >30 gm/kg [Details of toxic effects not reported other than lethal dose value]
Ingestion	Oral - Rat LD50 . >10 gm/kg [Details of toxic effects not reported other than lethal dose value]
<u>Carbon black:</u>	
RTECS Number	FF5800000
Skin:	Oral - Rat LD50: >15400 mg/kg [Behavioral - Somnolence (general depressed activity)] Administration onto the skin - Rabbit LD50: >3 gm/kg [Details of toxic effects not reported other than lethal dose value]
Ingestion	Oral - Rat LD50. >15400 mg/kg [Behavioral - Somnolence (general depressed activity)]

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity	No ecotoxicity data was found for the product.
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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

Oxirane, methyl-, polymer with :

TSCA Inventory Status: Listed

Canada DSL: Listed

Carbon black :

TSCA Inventory Status: Listed

California PROP 65: Listed: cancer.

Canada DSL: Listed

Canada WHMIS: WHMIS Hazard Class(es): D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

SECTION 16 : ADDITIONAL INFORMATION

HMIS Fire Hazard: 1

HMIS Health Hazard: 1

HMIS Reactivity: 0

HMIS Personal Protection: 1

MSDS Creation Date: 08/09/2010

MSDS Revision Date: 07/01/2013

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