KIT - SAFETY DATA SHEET

Product identifier used on the label:

Kit Name	**Structural Adhesive-Urethane (45 seconds)**
Stock No.	63642504647

Other means of identification:

Product Description:	Translucent adhesive/sealant
Synonyms:	None

Recommended use of the chemical and restrictions on use:

Product uses:	Urethane adhesive/sealant

Chemical manufacturer address and telephone number:

Manufacturer Name:	Saint-Gobain Abrasives, Inc.
Address:	1 New Bond Street Worcester, MA 01615
Website:	www.Nortonabrasives.com
General Phone Number:	508-795-5000

Chemical distributor address and telephone number:

Manufacturer Name:	Saint-Gobain Canada, Inc.
Address:	28 Albert Street, W ON Canada N0J 1S0
Website:	www.Nortonabrasives.com
General Phone Number:	519-684-7441

Emergency phone number:

Emergency Phone Number:	508-795-5000
CHEMTREC:	For emergencies in the US, call CHEMTREC: 800-424-9300 For emergencies in Canada, call CHEMTREC: 800-424-9300

Component list	
Structural Adhesive-Urethane (45 seconds) Part 1	Structural Adhesive-Urethane (45 seconds) Part 1
Structural Adhesive-Urethane (45 seconds) Part 2	Structural Adhesive-Urethane (45 seconds) Part 2
Kit SDS Revision Date	07/18/2018

Section 1: Identification of the Substance/Mixture and of the Company Undertaking

Product identifier used on the label:

Product Name:	Structural Adhesive-Urethane (45 seconds) Part 1

Other means of identification:

Product Codes:	63642504647
Product Description:	Part A Translucent adhesive / sealant
Chemical Family:	Aromatic Isocyanate/Isocyanates aromatiques

Recommended use of the chemical and restrictions on use:

Product Uses:	Urethane adhesive / sealant

Chemical manufacturer address and telephone number:

Manufacturer Name:	Saint-Gobain Abrasives, Inc.
Manufacturer Address 1:	1 New Bond Street
Manufacturer City:	Worcester
Manufacturer State:	MA
Manufacturer Zip Code:	01615
Manufacturer Country:	USA
Manufacturer Web:	www.Nortonabrasives.com
Business Phone:	508-795-5000
Distributor:	Saint-Gobain Canada, Inc.
Distributor Address 1:	28 Albert St, W.
Distributor City:	Plattsville
Distributor State:	ON
Distributor ZipCode:	N0J 1S0
Distributor Country:	Canada
Distributor Web:	www.Nortonabrasives.com
Distributor Phone:	519-684-7441

Emergency phone number:

Emergency Phone:	508-795-5000
Distributor Emergency Phone:	508-795-5000
Creation Date:	08/09/2010
Revision Date:	2018-07-18 15:53:31
Notes from Section 1:	CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300 For emergencies in Canada, call CHEMTREC: 800-424-9300

Section 2: Hazards Identification

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

Signal Words:	DANGER
Emergency Overview:	Immediate Concerns: Extremely flammable liquid and vapor. Fumes and spray mist may be harmful. May irritate the eyes, skin and respiratory system. May cause sensitization by inhalation and skin contact. Vapours may cause drowsiness and dizziness.

Product:

GHS Class:	GHS CLASSIFICATIONS: Health: Target Organ Toxicity (Repeated exposure), Category 2 Target Organ Toxicity (Single exposure), Category 3 Eye Irritation, Category 2 Skin Irritation, Category 2 Respiratory Sensitization, Category 1 Skin Sensitization, Category 1 Carcinogenicity, Category 2 GHS LABEL: Hazardous components for labelling: 4,4'-Diphenylmethane diisocyanate Health hazard Exclamation mark Hazards Not Otherwise Classified: No data available.
Hazard Statements:	H373 - May cause damage to organs (respiratory system) through prolonged or repeated exposure. H335 - May cause respiratory irritation. H319 - Causes serious eye irritation. H315 - Causes skin irritation. H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317 - May cause an allergic skin reaction. H351 - Suspected of causing cancer by inhalation.
Precautionary Statements:	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P264 - Wash hands thoroughly after handling. P272 - Contaminated work clothing should not be allowed out of the workplace. P260 - Do not breathe mist, vapours or spray. P271 - Use only outdoors or in a well-ventilated area. P284 - Wear respiratory protection. P280 - Wear protective gloves and eye protection. P308+P313 - IF exposed or concerned: Get medical advice/attention. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P302+P350 - IF ON SKIN: Gently wash with plenty of soap and water. P332+P313 - If skin irritation occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. P233 - Keep container tightly closed. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents/container in accordance with applicable local, regional and/or national regulations.

Hazards not otherwise classified that have been identified during the classification process:

Section 3: Composition/Information on Ingredients

Mixtures:

Ingredient Name	CAS Number	Ingredient Percent	EC Number	Comments
4,4'-Diphenylmethane diisocyanate	101-68-8	40 - 70%		
Diphenylmethane diisocyanate, mixed isomers	26447-40-5	1 - 10%		

Product:

Notes::

Comments:
< 5 % of the mixture consists of an ingredient or ingredients of unknown acute toxicity.
See sections 9 and 10 for more detailed information on physicochemical effects.
See section 11 for more detailed information on health effects.
See sections 12 for more detailed information on environmental effects.

This product is a consumer product and is labeled in accordance with the Canadian Consumer Chemicals and Containers Regulations and US Consumer Product Safety Commission regulations which take precedence over Canadian WHMIS 2015 and OSHA Hazcom 2012 Hazard Communication labeling. The actual container label will not include the above label elements. The labeling above applies to products used solely for industrial/professional use.

Comments:

Comments: There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the product and hence require reporting in this section.

Section 4: First Aid Measures

Description of necessary measures:

Eye Contact:

In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at least 15 minutes. Get medical attention, if irritation persists.

Skin Contact:

Wash with soap and water. Get medical attention if irritation develops or persists. Remove contaminated clothing and wash before reuse.

Inhalation:

If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain medical attention if breathing difficulty persists.

Ingestion:

Do not induce vomiting. Rinse mouth with water. Give 1 to 2 glasses of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed:
Indication of immediate medical attention and special treatment needed

Note To Physicians:

Respiratory: This compound is a known pulmonary sensitizer. Treatment is essentially symptomatic. An individual having a skin or pulmonary sensitization reaction to this material should be removed from exposure to any isocyanate. Skin: This compound is a known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burns.

Notes from Section 4:	Signs and Symptoms of Overexposure: Eye Contact: Product liquid, aerosols or vapours are irritating. Can cause tearing, reddening and swelling. May cause temporary corneal injury. Skin Contact: Contact causes skin irritation. Cured material is difficult to remove. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Cured material is difficult to remove. Ingestion: Substance may be harmful if swallowed. May cause irritation. Symptoms of ingestion may include abdominal pain, nausea, vomiting and diarrhea. Inhalation: High vapor concentrations may be harmful if inhaled. Vapour/mists at concentrations above the exposure limits can irritate (burning sensation) the mucous membranes in the respiratory tract. This can cause a runny nose, sore throat, coughing, chest discomfort, difficult breathing and reduced pulmonary functioning. Persons with pre-existing, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV with similar symptoms as well as asthma attack. Exposure well above the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema. Chemical or hypersensitive pneumonitis, with flu-like symptoms has also been reported. These symptoms can be delayed up to several hours after exposure. Effects are usually reversible. Additional Information: Not Available.

Section 5: Firefighting Measures

Suitable and unsuitable extinguishing media

Extinguishing Media:	Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material. Use an extinguishing agent suitable for the surrounding fire.

Specific hazards arising from the chemical

Hazardous Combustion Products:	During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Carbon dioxide, carbon monoxide. Nitrous gases, fumes/smoke, isocyanate, vapour.
Sensitivity To Impact:	Sensitivity to Mechanical Impact: Product is not sensitive to mechanical impact.
Static Discharge Effects:	Sensitivity to Static Discharge: Product is not sensitive to static discharge.

Special protective equipment and precautions for fire-fighters

Fire Fighting Instructions:	Containers can build up pressure if exposed to heat (fire).
Fire Fighting Equipment:	As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.
NFPA Health:	3
NFPA Fire:	1
NFPA Reactivity:	1

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personnel Precautions:	Clean up spills immediately, observing precautions in Protective Equipment section 8.

Methods and materials for containment and cleaning up

Small Spill:	Eliminate all ignition sources. Cover spill area with suitable absorbent material (e.g., sand, earth, sawdust, vermiculite, Oil-Dri, Kitty Litter, etc.). Saturate absorbent material with neutralizing solution. Add an additional layer of absorbent material. Use shovel to move absorbent material around to ensure that all spilled material comes in contact with the neutralizing solution. Shovel all absorbed material into an appropriate salvage drum. Allow to stand (covered loosely) for 48 to 72 hours, to allow any gases to escape. Decontaminate spill area with neutralizing solution. Area can then be washed with soap and water. Recommended portion is ten parts neutralizing solution to one part spilled material. Suggested neutralization solution:. 90% water + 5% concentrated ammonia + 5% detergent (dish soap).
Land Spill:	Avoid runoff into storm sewers and ditches which lead to waterways.
Water Spill:	Do not discharge into drains/surface waters/groundwater.

Environmental precautions

Section 7: Handling and Storage

Precautions for safe handling

Handling:	Use only in a well ventilated area. Wear recommended personal protective equipment. Keep container closed when not in use. Avoid breathing vapours or mist. Avoid contact with eyes, skin, and clothing. After handling, always wash hands thoroughly with soap and water.
Hygiene Practices:	Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Eye wash fountains and safety showers must be easily assessible. Do not breathe vapour/spray. Exposure levels must be monitored by accepted monitoring techniques to ensure that the TLV is not exceeded. Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrant skin eczema or sensitization should be excluded from working with isocyanates. Once a person is diagnosed as sensitized to an isocyanate, no further exposure can be permitted. Employee education and training are important.

Conditions for safe storage, including any incompatibilities

Storage:	Store away from heat, sparks, open flames, strong oxidizing agents and direct sunlight. Protect from physical damage. Protect against moisture. Keep container tightly closed and in a well-ventilated place. Store in a cool dry place.
Notes from Section 7:	Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids. Ensure thorough ventilation of stores and work areas. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapour or spray mist. Warning properties (irritation of the eyes, nose and throat or odour) are not adequate to prevent chronic overexposure from inhalation. Handle in accordance with good industrial hygiene and safety practices.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

Exposure limit:	OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200): Occupational Exposure Limits: Chemical Name: 4,4'-Diphenylmethane diisocyanate OSHA PEL: STEL: 0.02 ppm; 0.2 mg/m3 ACGIH TLV: TWA: 0.005 ppm; 0.051 mg/m3 NIOSH REL: TWA: 0.005 ppm; 0.05 mg/m3 STEL: 0.02 ppm; 0.2 mg/m3

Appropriate engineering controls

Engineering Controls:	Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

Individual protection measures

Eye Protection:	Wear safety glasses with side shields (or goggles). Contact lenses should not be worn when working with this product. Eye wash fountains should be readily available to areas of use and handling.
Face Protection:	Wear safety glasses with side shields (or goggles). Contact lenses should not be worn when working with this product. Eye wash fountains should be readily available to areas of use and handling.
Skin Protection:	Chemical resistant gloves: butyl rubber, nitrile rubber, neoprene, PVC.
Protective Clothing:	Wear protective clothing as necessary to prevent contact. Wear long sleeves and trousers to prevent dermal exposure.
Respiratory Protection:	If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. Respirator type: NIOSH/MSHA 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. Be sure to use MSHA/NIOSH approved respirator or equipment. Do not exceed the use limits of the respirator. Respiratory equipment required during spraying: The use of a positive pressure air supplied respirator is mandatory when airborne concentrations are not known or airborne solvent levels are 10 times the appropriate TLV or spraying is performed in a confined space or area with limited ventilation. Be sure to use MSHA/NIOSH approved respirator or equipment.
Hygiene Practices:	Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Eye wash fountains and safety showers must be easily assessible. Do not breathe vapour/spray. Exposure levels must be monitored by accepted monitoring techniques to ensure that the TLV is not exceeded. Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrant skin eczema or sensitization should be excluded from working with isocyanates. Once a person is diagnosed as sensitized to an isocyanate, no further exposure can be permitted. Employee education and training are important.

Section 9: Physical and Chemical Properties

Physical and chemical properties

Physical State:	Liquid Appearance: Mobile liquid

Color:	Translucent
Odor:	Musty
pH:	No data available.
Melting Temperature:	No data available.
Boiling Temperature:	No data available.
Flash Point:	> 200 deg C
Flash Point Method:	Closed Cup
Ignition Temperature:	> 400 deg C (750 deg F)
Vapor Pressure:	< 10-5 mm Hg at 20 deg C
Vapor Density:	> 1
Freezing Temperature:	No data available.
Density:	1.23 +/- 0.02 g/ml at 20 deg C
Solubility In Water:	Practically insoluble
Evaporation Rate:	(n-butyl acetate = 1): > 1
Partition Coefficient:	(n-octanol/water): Not Available
Percent Volatile:	< 1 % w/w
VOC Content:	< 10 g/l
Viscosity:	> 200 cps at 20 deg C
Odor Threshold:	Not Available
Oxidizing Properties:	None
Note from Section 9:	Flammable Limits: No data available.

Section 10: Stability and Reactivity

Reactivity:

Reactivity:	Reactive Hazard: Yes Possibility of Hazardous Reactions: Reacts with water, with formation of carbon dioxide. Risk of bursting. Reacts with alcohols, acids, alkalies and amines. Risk of exothermic reaction. Risk of violent reaction. Risk of polymerization.

Chemical Stability:

Chemical Stability:	Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

Hazardous Polymerization:	Contact with moisture or other materials that react with isocyanates, or temperatures above 177 C, may cause polymerization.

Conditions To Avoid:

Conditions To Avoid:	Avoid moisture.

Incompatible Materials:

Incompatible Materials:	Water, amines, strong bases, alcohols. Copper alloys.
Hazardous Decomposition Products:	By fire and high heat: Carbon monoxide, Carbon dioxide, Oxides of nitrogen, Hydrogen cyanide, Isocyanates, Isocyanic acid, other undetermined compounds.

Section 11: Toxicological Information

Toxicological Information:

Product:

Acute Toxicity:	Toxicological Data: < 5% of the mixture consists of an ingredient or ingredients of unknown acute toxicity. No additional toxicology information is available for this product itself. (See Component Toxicity Information).
Skin Toxicity:	Acute Toxicity - Dermal LD50: The calculated ATE is > 2000 mg/kg. Notes: Based on available data, the classification criteria for Acute Dermal Toxicity are not met for this mixture.
Ingestion Toxicity:	Acute Toxicity - Oral LD50: The calculated ATE is > 2000 mg/kg. Notes: Based on available data, the classification criteria for Acute Oral Toxicity are not met for this mixture.
Inhalation Toxicity:	Acute Toxicity - Inhalation LC50: The calculated ATE is >1 and less than or ≤ 5 mg/l/4h (mists). The calculated ATE is >20 mg/l/4h (vapours). Notes: Based on available data, the classification criteria for Acute Toxicity - inhalation are not met for this mixture. At room temperature, exposure to vapor is minimal due to low volatility. This product is not sprayed during application; no spray mist can be generated so this route of exposure does not apply.
Route of Exposure:	Primary: Eye contact. Inhalation. Skin contact. Ingestion.
Carcinogenicity:	Notes: The mixture is classified as: Carcinogenicity, category 2 based on ingredient data using the applicable cutoff/ concentration limits (≥ 0.1% ingredients classified as a Carcinogen, category 2).
Mutagenicity:	Germ Cell Mutagenicity: Based on available data, the classification criteria for Germ Cell Mutagenicity are not met for this mixture (< 0.1% ingredients classified as Germ Cell Mutagen, category 1A or 1B and < 1.0% ingredients classified as Germ Cell Mutagen, category 2).
Reproductive Toxicity:	Based on available data, the classification criteria for Reproductive Toxicity are not met for this mixture (< 0.1% ingredients classified as Reproductive Toxicity, category 1 or 2).

4,4'-Diphenylmethane diisocyanate:

Skin Toxicity:	Product Acute Toxicity: DERMAL LD50 (rabbit): > 10,000 mg/kg
Ingestion Toxicity:	Product Acute Toxicity: ORAL LD50 (rat): > 10,000 mg/kg
Inhalation Toxicity:	Product Acute Toxicity: INHALATION LC50: 0.369 mg/l (rat;4h - mist)

Irritation:	Eye Irritation/Serious Eye Damage: Contains: 4,4'-Diphenylmethane diisocyanate. Contact causes serious eye irritation. The mixture is classified as: Eye Irritant, category 2, based on summation of ingredient data (> 10% ingredients classified as eye irritant, category 2). Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. Skin Irritation/Corrosion: Contains: 4,4'-Diphenylmethane diisocyanate. Causes skin irritation. The mixture is classified as: Skin Irritant, category 2, based on summation of ingredient data (> 10% ingredients classified as skin irritant, category 2). Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash.
Sensitization:	Respiratory/Skin Sensitizer: Contains: 4,4'-Diphenylmethane diisocyanate. The mixture is classified as: Skin Sensitizer, category 1 based on ingredient data (≥ 0.1% ingredients classified as a skin sensitizer, category 1 or sub-category 1A or ≥ 1.0% ingredients classified as a skin sensitizer, sub-category 1B). The mixture is classified as: Respiratory Sensitizer, category 1 based on ingredient data (≥ 0.1% ingredients classified as a respiratory sensitizer, category 1 or subcategory 1A or ≥ 1.0% ingredients classified as a respiratory sensitizer, sub-category 1B). May cause sensitization by inhalation and skin contact. As a result of previous repeated overexposure or a single large dose, certain individuals develop sensitization which will cause them to react to a later exposure to product at levels well below the TLV. Symptoms including chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed. There are reports that once sensitized, an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Sensitization can be permanent. Prolonged contact with this product can cause reddening, swelling, rash scaling or blistering. In those who have developed skin sensitization, these symptoms can develop as a result of contact with very small amount of the liquid material.

Section 12: Ecological Information

Ecotoxicity:

Product:

Ecotoxicity:	No data available.
Effect of Material On Aquatic:	Aquatic Toxicity (Acute): No data available.

Bioaccumulative potential:

Product:

BioAccumulation:	Bioaccumulation/Accumulation: No data available.

Mobility in soil:

Product:

Notes from Section 12:	Environmental Data: No data available. Distribution: No data available. Chemical Fate Information: No data available.

Section 13: Disposal Considerations

Description of waste:

Waste Disposal:	Disposal Method: Comply with applicable local, state or international regulations concerning solid or hazardous waste disposal and/or container disposal. Do not discharge substance/product into sewer system. Product Disposal: Empty containers retain product residue; observe all precautions for product. Decontaminate containers prior to disposal.

Section 14: Transport Information

DOT Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(4,4'-Diphenylmethane diisocyanate)
DOT UN Number:	3082
DOT Hazard Class:	Primary Hazard Class/Division: 9
DOT Packing Group:	III
DOT Other:	Other Shipping Information: These Regulations do not apply to the handling, offering for transport or transporting of less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle.
IMDG Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(4,4'-Diphenylmethane diisocyanate)
IMDG UN Number:	3082
IMDG Hazard Class:	Primary Hazard Class/Division: 9
IMDG Packing Group:	III
IMDG Other:	Marine Pollutant: None Note: With an inner packaging < 5.0 L, this product may be shipped as a Limited Quantity.
IATA Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(4,4'-Diphenylmethane diisocyanate)
IATA UN Number:	3082
IATA Hazard Class:	Primary Hazard Class/Division: 9
IATA Packing Group:	III
Canada Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(4,4'-Diphenylmethane diisocyanate)
Canada UN Number:	3082
Canada Hazard Class:	Primary Hazard Class/Division: 9
Canada Other:	Packing Group: III TDG Note: These Regulations do not apply to the handling, offering for transport or transporting of less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle.
ICAO Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(4,4'-Diphenylmethane diisocyanate)
ICAO UN Number:	3082
ICAO Packing Group:	III
ICAO Hazard Class:	Primary Hazard Class/Division: 9

Notes from Section 14:

Vessel (IMO):
Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(4,4'-Diphenylmethane diisocyanate)
UN/NA Number: 3082
Primary Hazard Class/Division: 9
Packing Group: III
Marine Pollutant: None
Note: With an inner packaging < 5.0 L, this product may be shipped as a Limited Quantity.

Section 15: Regulatory Information

Safety, health and environmental regulations specific for the product:

Regulatory - Product Based:

Section 312 Hazard Category:

SARA Section 311/312 Hazard Categories:
Fire Hazard: No
Sudden Release of Pressure: No
Reactive Hazard: No
Product Acute Toxicity: Yes
Product Chronic Toxicity: Yes

Section 302:

EPCRA Section 302 Extremely Hazardous Substances:
EPCRA Status:
This product contains no listed extremely hazardous substances that are subject to the reporting requirements of SARA Title III, Section 302.

TSCA 8(b): Inventory Status:

All components are included or are otherwise exempt from inclusion on this inventory.

Section 112(r): Clean Air Act:

CAA 112(r) - List of Substances for Accidental Release Prevention:
This product contains no chemicals subject to CAA 112(b) or CAA 112(r).

State:

California Proposition 65:
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

OSHA 29 CFR 1200:

OSHA Hazard Communication Standard (29 CFR 1910.1200):
OSHA Status: Hazardous Product (See Section 2 for details).
This product has been classified in accordance with the hazard criteria of the USA OSHA Hazard Communication Standard (29CFR 1910.1200) and the Safety Data Sheet contains all the information required by the OSHA Hazard Communication Standard (HazCom 2012).

Canada WHMIS:

WHMIS Hazard Symbol and Classification:
See Section 2 for details.

WHMIS Regulatory Status:
This product has been classified in accordance with the hazard criteria of the Canadian Hazardous Products Regulations and the Safety Data Sheet contains all the information required by the Hazardous Products Regulations (WHMIS 2015).

WHMIS Classification:
WHMIS 2015 (Canada) Status: Hazardous Product (See Section 2 for details).

CEPA - National Pollutant Release Inventory (NPRI):
This product contains no chemicals subject to CEPA - NPRI.

Domestic Substances List (DSL)/Non-Domestic Substances List (NDSL):
All components are included or are otherwise exempt from inclusion on this inventory.

Canada IDL:

WHMIS Ingredient Disclosure List:
Ingredients present which are on the WHMIS Ingredient Disclosure List at, or above the minimum concentration specified on the list, are disclosed in Section 3.

Comments:

VOC Content -- See section 9.

Regulatory - Ingredient Based:

4,4'-Diphenylmethane diisocyanate:

Section 313 Toxic Release Form:

EPCRA Section 313 Toxic Chemicals:
Chemical Name: 4,4'-Diphenylmethane diisocyanate
Wt.%: 40 - 70
CAS No.: 101-68-8

Section 304:

CERCLA Hazardous Substances and Reportable Quantities (RQ):
Chemical Name: 4,4'-Diphenylmethane diisocyanate
Wt.%: 40 - 70
RQ: 5,000

Section 16: Additional Information

Creation Date: 08/09/2010

Revision Date: 2018-07-18 15:53:31

HMIS:

Health	**3***
Flammability	**1**
Reactivity	**1**
PPE	**G**

Chronic Health Hazard

NFPA:

Other Information:

Section 1: Identification of the Substance/Mixture and of the Company Undertaking

Product identifier used on the label:

Product Name:	Structural Adhesive-Urethane (45 seconds) Part 2

Other means of identification:

Product Codes:	63642504647
Product Description:	Part B Translucent adhesive/sealant
Chemical Family:	Polyether Polyol

Recommended use of the chemical and restrictions on use:

Product Uses:	Urethane adhesive/sealant

Chemical manufacturer address and telephone number:

Manufacturer Name:	Saint-Gobain Abrasives, Inc.
Manufacturer Address 1:	1 New Bond Street
Manufacturer City:	Worcester
Manufacturer State:	MA
Manufacturer Zip Code:	01615
Manufacturer Country:	USA
Manufacturer Web:	www.Nortonabrasives.com
Supplier Name:	Saint-Gobain Abrasives, Inc.
Business Phone:	508-795-5000
Distributor:	Saint-Gobain Canada, Inc.
Distributor Address 1:	28 Albert St, W.
Distributor City:	Plattsville
Distributor State:	ON
Distributor ZipCode:	N0J 1S0
Distributor Country:	Canada
Distributor Web:	www.Nortonabrasives.com
Distributor Phone:	519-684-7441

Emergency phone number:

Emergency Phone:	508-795-5000
Distributor Emergency Phone:	508-795-5000
Creation Date:	08/09/2010
Revision Date:	2018-07-18 15:51:37
Notes from Section 1:	CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300 For emergencies in Canada, call CHEMTREC: 800-424-9300

Section 2: Hazards Identification

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

Signal Words: Warning

Emergency Overview:

Immediate Concerns:
Causes serious eye irritation. May cause sensitization by skin contact. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Prolonged or repeated exposure may cause liver damage.

Product:

GHS Class:

Health:
Target Organ Toxicity (Repeated exposure), Category 2
Eye Irritation, Category 2A
Skin Sensitization, Category 1

Hazard Statements:

H373 - May cause damage to organs through prolonged or repeated exposure .
H319 - Causes serious eye irritation.
H317 - May cause an allergic skin reaction.

Precautionary Statements:

P264 - Wash hands thoroughly after handling.
P260 - Do not breathe vapours.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves and eye protection.
P314 - Get medical advice/attention if you feel unwell.
P302+P350 - IF ON SKIN: Gently wash with plenty of soap and water.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362 - P362+P364: Take off contaminated clothing and wash it before reuse.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Hazards not otherwise classified that have been identified during the classification process:

Section 3: Composition/Information on Ingredients

Mixtures:

Ingredient Name	CAS Number	Ingredient Percent	EC Number	Comments
Diethyltoluenediamine	68479-98-1	8 - 12%		
Dimethylthiotoluenediamine	106264-79-3	1 - 5%		

Product:

Notes::	GHS LABEL: Hazardous components for labelling: Diethyltoluenediamine and Dimethylthiotoluenediamine Exclamation mark Health hazard Hazards Not Otherwise Classified: No data available. Comments: < 10% of the mixture consists of an ingredient or ingredients of unknown acute toxicity. See sections 9 and 10 for more detailed information on physicochemical effects. See section 11 for more detailed information on health effects. See sections 12 for more detailed information on environmental effects. The actual container label may not include the above label elements. The labeling shown above applies to products used solely for industrial/professional use. Consumer products should be labeled in accordance with the Canadian Consumer Chemicals and Containers Regulations and US Consumer Product Safety Commission regulations. Consumer product labeling takes precedence over Canadian WHMIS 2015 and OSHA Hazcom 2012 Hazard Communication labeling.
Comments:	Comments: There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the product and hence require reporting in this section.

Section 4: First Aid Measures

Description of necessary measures:

Eye Contact:	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention, if irritation persists.
Skin Contact:	Wash with soap and water. Get medical attention if irritation develops or persists. Remove contaminated clothing and wash before reuse.
Inhalation:	Not expected to present a significant inhalation hazard under anticipated conditions of normal use. If you experience eye watering, headaches or dizziness, increase fresh air or leave the area.
Ingestion:	Do not induce vomiting. Rinse mouth with water. Give 1 to 2 glasses of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed:
Indication of immediate medical attention and special treatment needed

Notes from Section 4:	Signs and Symptoms of Overexposure: Eye Contact: Contact causes serious eye irritation. Symptoms may include pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. Skin Contact: Substance does not generally irritate and is only mildly irritating to the skin. Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis). Ingestion: Substance may be harmful if swallowed. May cause irritation. Symptoms of ingestion may include abdominal pain, nausea, vomiting and diarrhea. Inhalation: At room temperature, exposure to vapor is minimal due to low volatility. Additional Information: No data available.

Section 5: Firefighting Measures

Suitable and unsuitable extinguishing media

Extinguishing Media:	Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material. Use an extinguishing agent suitable for the surrounding fire.

Specific hazards arising from the chemical

Hazardous Combustion Products:	During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Sensitivity To Impact:	Sensitivity to Mechanical Impact: Product is not sensitive to mechanical impact.
Static Discharge Effects:	Sensitivity to Static Discharge: Product is not sensitive to static discharge.

Special protective equipment and precautions for fire-fighters

Fire Fighting Instructions:	Fire Fighting Procedures: Containers can build up pressure if exposed to heat (fire).
Fire Fighting Equipment:	As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.
NFPA Health:	2
NFPA Fire:	1
NFPA Reactivity:	0

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personnel Precautions:	Special Protective Equipment: Clean up spills immediately, observing precautions in Protective Equipment section 8.

Methods and materials for containment and cleaning up

Small Spill:	Ensure adequate ventilation. Cover spill area with suitable absorbent material (e.g., sand, earth, sawdust, vermiculite, Oil-Dri, Kitty Litter, etc.). Sweep up material being careful not to raise dust. Place in an appropriate disposal container and seal tightly. Avoid contact with eyes, skin, and clothing.
Land Spill:	Avoid runoff into storm sewers and ditches which lead to waterways.
Water Spill:	Do not flush to sewer.

Environmental precautions

Section 7: Handling and Storage

Precautions for safe handling

Handling:	Do not use in the presence of open flame or spark. Wear recommended personal protective equipment. Avoid contact with eyes, skin, and clothing. After handling, always wash hands thoroughly with soap and water.
Hygiene Practices:	Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse.

Conditions for safe storage, including any incompatibilities

Storage:	Store away from heat, sparks, open flames, strong oxidizing agents and direct sunlight. Protect from physical damage. Keep containers tightly closed, when not in use. Store in a cool place.
Notes from Section 7:	General Procedures: Ensure thorough ventilation of stores and work areas.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

Exposure limit:

Occupational Exposure Limits:
Chemical Name: Diethyltoluenediamine
OSHA PEL TWA:
ppm: 1. NL: This material does not have established exposure limits.
mg/m3: 1. NL: This material does not have established exposure limits.

ACGIH TLV TWA:
ppm: 1. NL: This material does not have established exposure limits.
mg/m3: 1. NL: This material does not have established exposure limits.

NIOSH REL TWA:
ppm: 1. NL: This material does not have established exposure limits.
mg/m3: 1. NL: This material does not have established exposure limits.

Chemical Name: Dimethylthiotoluenediamine
OSHA PEL TWA:
ppm: 1. NL: This material does not have established exposure limits.
mg/m3: 1. NL: This material does not have established exposure limits.

ACGIH TLV TWA:
ppm: 1. NL: This material does not have established exposure limits.
mg/m3: 1. NL: This material does not have established exposure limits.

NIOSH REL TWA:
ppm: 1. NL: This material does not have established exposure limits.
mg/m3: 1. NL: This material does not have established exposure limits.

Footnotes:
1. NL: This material does not have established exposure limits.

Appropriate engineering controls

Engineering Controls:	Good general ventilation should be sufficient to control airborne levels.

Individual protection measures

Eye Protection:	Wear safety glasses with side shields (or goggles). Contact lenses should not be worn when working with this product. Eye wash fountains should be readily available to areas of use and handling.
Face Protection:	Wear safety glasses with side shields (or goggles). Contact lenses should not be worn when working with this product. Eye wash fountains should be readily available to areas of use and handling.
Skin Protection:	Wear chemical resistant gloves.
Protective Clothing:	Wear protective clothing as necessary to prevent contact.
Respiratory Protection:	Generally not required. Wear respiratory protection if ventilation is inadequate.
Hygiene Practices:	Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse.

Section 9: Physical and Chemical Properties

Physical and chemical properties

Physical State:	Liquid
	Appearance: Mobile liquid
Color:	Clear
Odor:	Mild, amine
pH:	No data available.
Melting Temperature:	Not Applicable
Boiling Temperature:	No data available.
Flash Point:	> 100 deg C (212 deg F)
Flash Point Method:	Closed Cup
Ignition Temperature:	No data available.
Vapor Pressure:	No data available.
Vapor Density:	No data available.
Freezing Temperature:	No data available.
Density:	1.10 ± 0.02 g/l at 20 deg C
Solubility In Water:	Practically insoluble
Evaporation Rate:	(n-butyl acetate = 1): No data available.
Percent Volatile:	< 1% w/w
VOC Content:	< 10 g/l
Viscosity:	> 100 cps at 25 deg C
Odor Threshold:	No data available.
Octanol Water Partition Coef:	No data available.
Oxidizing Properties:	None
Note from Section 9:	Flammable Limits: No data available.

Section 10: Stability and Reactivity

Reactivity:

Reactivity:	Reactive Hazard: No

Chemical Stability:

Chemical Stability:	Stable.

Possibility of hazardous reactions:

Hazardous Polymerization:	Not expected to occur.

Conditions To Avoid:

Conditions To Avoid:	Keep away from flames and any object that sparks.

Incompatible Materials:

Incompatible Materials:	Oxidizing materials.
Hazardous Decomposition Products:	Carbon Monoxide and other toxic vapors.

Notes from Section 10:	Possibility of Hazardous Reactions: No data available.

Section 11: Toxicological Information

Toxicological Information:

Product:

Skin Toxicity:	Acute Toxicity - Dermal LD50: The calculated ATE is > 2000 mg/kg. Notes: Based on available data, the classification criteria for Acute Dermal Toxicity are not met for this mixture.
Ingestion Toxicity:	Acute Toxicity - Oral LD50: The calculated ATE is > 2000 mg/kg. Notes: Based on available data, the classification criteria for Acute Oral Toxicity are not met for this mixture.
Inhalation Toxicity:	Acute Toxicity - Inhalation LC50: No data available. Notes: The mixture is not classified due to lack of data. At room temperature, exposure to vapor is minimal due to low volatility. An estimate based on component information. Not classified.
Target Organ Data:	Specific Target Organ Toxicity - Repeated Exposure: The mixture is classified as: Specific Target Organ Toxicity - Repeated Exposure, category 2, based on ingredient data using the applicable cut-off/concentration limits (≥ 1.0% ingredients classified as Specific Target Organ Toxicity - Repeated Exposure, category 2). Repeated, excessive exposures may cause liver effects. Specific Target Organ Toxicity - Single Exposure: Based on available data, the classification criteria for Specific Target Organ Toxicity - Single Exposure are not met for this mixture (< 1.0% ingredients classified as Specific Target Organ Toxicity - Single Exposure, category 1 or 2 and < 20% summation of all ingredients classified as Specific Target Organ Toxicity - Single Exposure, category 3).
Carcinogenicity:	Notes: Based on available data, the classification criteria for Carcinogenicity are not met for this mixture (< 0.1% ingredients classified as a Carcinogen, category 1 or 2).
Mutagenicity:	Germ Cell Mutagenicity: Based on available data, the classification criteria for Germ Cell Mutagenicity are not met for this mixture (< 0.1% ingredients classified as Germ Cell Mutagen, category 1A or 1B and < 1.0% ingredients classified as Germ Cell Mutagen, category 2).
Reproductive Toxicity:	Based on available data, the classification criteria for Reproductive Toxicity are not met for this mixture (< 0.1% ingredients classified as Reproductive Toxicity, category 1 or 2).
Irritation:	Eye Irritation/Serious Eye Damage: Contact causes serious eye irritation. The mixture is classified as: Eye Irritant, category 2, based on summation of ingredient data (>10% ingredients classified as eye irritant, category 2). Symptoms may include pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. Skin Irritation/Corrosion: Based on available data, the classification criteria for skin irritation are not met for this mixture. Substance does not generally irritate and is only mildly irritating to the skin.

Sensitization:	Respiratory/Skin Sensitizer: May cause sensitization by skin contact. The mixture is classified as: Skin Sensitizer, category 1 based on ingredient data (≥ 0.1% ingredients classified as a skin sensitizer, category 1 or sub-category 1A or ≥ 1.0% ingredients classified as a skin sensitizer, sub-category 1B). Prolonged contact with this product can cause reddening, swelling, rash scaling or blistering. In those who have developed skin sensitization, these symptoms can develop as a result of contact with very small amount of the liquid material. Based on available data, the classification criteria for respiratory sensitization are not met for this mixture (< 0.1% ingredients classified as a respiratory sensitizer, category 1 or sub-category 1A and < 1.0% ingredients classified as a respiratory sensitizer, sub-category 1B).
Notes from Section 11:	Toxicological Data: 10% of the mixture consists of an ingredient or ingredients of unknown acute toxicity. No additional toxicology information is available for this product itself. (See Component Toxicity Information).

Dimethylthiotoluenediamine:

Skin Toxicity:	DERMAL LD50 mg/kg(rabbit): > 2000
Ingestion Toxicity:	ORAL LD50 mg/kg(rat): 1515
Inhalation Toxicity:	INHALATION LC50 mg/l: No data available.

Diethyltoluenediamine:

Skin Toxicity:	DERMAL LD50 mg/kg(rabbit): > 1000
Ingestion Toxicity:	ORAL LD50 mg/kg(rat): 472, 542
Inhalation Toxicity:	INHALATION LC50 mg/l: > 2.45(rat;1h)

Section 12: Ecological Information

Ecotoxicity:

Product:

Ecotoxicity:	Ecotoxicological Information: No data available.

Bioaccumulative potential:

Product:

BioAccumulation:	Bioaccumulation/Accumulation: No data available.

Mobility in soil:

Product:

Notes from Section 12:	Environmental Data: No data available. Distribution: No data available. Aquatic Toxicity (Acute): No data available. Chemical Fate Information: No data available.

Section 13: Disposal Considerations

Description of waste:

Waste Disposal:	Disposal Method: Comply with applicable local, state or international regulations concerning solid or hazardous waste disposal and/or container disposal. Do not discharge substance/product into sewer system. Product Disposal: Empty containers retain product residue; observe all precautions for product. Decontaminate containers prior to disposal.

Section 14: Transport Information

DOT Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diethyltoluenediamine and Dimethylthiotoluenediamine)
DOT UN Number:	3082
DOT Hazard Class:	Primary Hazard Class/Division: 9
DOT Packing Group:	III
DOT Other:	Marine Pollutant: Yes Other Shipping Information: These Regulations do not apply to the handling, offering for transport or transporting of less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle.
IMDG Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diethyltoluenediamine and Dimethylthiotoluenediamine)
IMDG UN Number:	3082
IMDG Hazard Class:	Primary Hazard Class/Division: 3
IMDG Packing Group:	III
IMDG Other:	Marine Pollutant: Yes Label: None Note: With an inner packaging < 5.0 L, this product may be shipped as a Limited Quantity.
Canada Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Diethyltoluenediamine and Dimethylthiotoluenediamine)
Canada UN Number:	3082
Canada Hazard Class:	Primary Hazard Class/Division: 3
Canada Other:	Packing Group: III Label: None TDG Note: These Regulations do not apply to the handling, offering for transport or transporting of less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle.
Notes from Section 14:	Vessel (IMO): Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diethyltoluenediamine and Dimethylthiotoluenediamine) UN/NA Number: 3082 Primary Hazard Class/Division: 3 Packing Group: III Marine Pollutant: Yes Label: None Note: With an inner packaging < 5.0 L, this product may be shipped as a Limited Quantity.

Section 15: Regulatory Information

Safety, health and environmental regulations specific for the product:

Regulatory - Product Based:

Section 312 Hazard Category:

SARA Section 311/312 Hazard Categories:
Fire Hazard: No
Sudden Release of Pressure: No
Reactive Hazard: No
Product Acute Toxicity: Yes
Product Chronic Toxicity: Yes

Section 313 Toxic Release Form:

EPCRA Section 313 Toxic Chemicals:
This product does not contain any listed toxic chemicals that exceed the threshold reporting levels established by SARA Title III, Section 313.

Section 302:

EPCRA Section 302 Extremely Hazardous Substances:
EPCRA Status:
This product contains no listed extremely hazardous substances that are subject to the reporting requirements of SARA Title III, Section 302.

TSCA 8(b): Inventory Status:

TSCA Status: All components are included or are otherwise exempt from inclusion on this inventory.

Section 112(r): Clean Air Act:

CAA 112(b) - Hazardous Air Pollutants:
CAA 112(r) - List of Substances for Accidental Release Prevention:
This product contains no chemicals subject to CAA 112(b) or CAA 112(r).

OSHA 29 CFR 1200:

OSHA Hazard Communication Standard (29 CFR 1910.1200):
OSHA Status: Hazardous Product (See Section 2 for details).

This product has been classified in accordance with the hazard criteria of the USA OSHA Hazard Communication Standard (29CFR 1910.1200) and the Safety Data Sheet contains all the information required by the OSHA Hazard Communication Standard (HazCom 2012).

Canada WHMIS:

WHMIS Hazard Symbol and Classification:
See Section 2 for details.

WHMIS Regulatory Status:
This product has been classified in accordance with the hazard criteria of the Canadian Hazardous Products Regulations and the Safety Data Sheet contains all the information required by the Hazardous Products Regulations (WHMIS 2015).

WHMIS Classification:
WHMIS 2015 (Canada) Status: Hazardous Product (See Section 2 for details).

CEPA - National Pollutant Release Inventory (NPRI):
This product contains no chemicals subject to CEPA - NPRI.

Domestic Substances List (DSL)/Non-Domestic Substances List (NDSL):
All components are included or are otherwise exempt from inclusion on this inventory.

Notes 1:

Comments:
VOC Content -- See section 9.

Section 16: Additional Information

Creation Date: 08/09/2010

Revision Date: 2018-07-18 15:51:37

Notes from Section 16: NFPA 30/30B Storage Classification: Combustible Liquid IIIB

Comments from Section 16: None

HMIS:

Health	**2***
Flammability	**1**
Reactivity	**0**
PPE	**B**

Chronic Health Hazard

NFPA:

Other Information: