

Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3MTM Controlled-Flow Seam Sealer PN 08329, 58329

Product Identification Numbers

60-4550-3057-1 60-4550-7124-5 XS-0414-1781-6

1.2. Recommended use and restrictions on use

Recommended use

Sealant

1.3. Supplier's details

Company: 3M Canada Company **Division:** Automotive Aftermarket

Address: 1840 Oxford Street East, Post Office Box 5757, London, Ontario N6A 4T1

Telephone: (800) 364-3577

E Mail:

1.4. Emergency telephone number

Medical Emergency Telephone: 1-800-3M HELPS / 1-800-364-3577; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS) or Article Information Sheet (AIS) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

22-2184-4, 34-0447-2

Transport in accordance with applicable regulations.

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. The manufacturer MAKES NO WARRANTIES, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF PERFORMANCE, COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the product is fit

for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M Canada SDSs are available at www.3M.ca

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Safety Data Sheet

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 2.01

 Issue Date:
 2020/10/26
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 2019/05/22

This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Regulations.

SECTION 1: Identification

1.1. Product identifier

3MTM Controlled-Flow Seam Sealer PN 08329 (Part A)

1.2. Recommended use and restrictions on use

Intended Use

Automotive

Specific Use

Sealant

Restrictions on use

Not applicable

1.3. Supplier's details

Company: 3M Canada Company **Division:** Automotive Aftermarket

Address: 1840 Oxford Street East, Post Office Box 5757, London, Ontario N6A 4T1

Telephone: (800) 364-3577 **Website:** www.3M.ca

1.4. Emergency telephone number

Medical Emergency Telephone:1-800-3M HELPS / 1-800-364-3577; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Serious Eye Damage/Irritation: Category 2A. Skin Corrosion/Irritation: Category 2. Respiratory Sensitizer: Category 1. Skin Sensitizer: Category 1.

Carcinogenicity: Category 2.

Specific Target Organ Toxicity (single exposure): Category 3. Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Exclamation mark | Health Hazard |

Pictograms





Hazard statements

Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation. Suspected of causing cancer.

Causes damage to organs through prolonged or repeated exposure: respiratory system

Precautionary statements

General:

Keep out of reach of children. Read label before use. If medical advice is needed, have product container or label at hand.

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Wear protective gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Call a POISON centre or doctor/physician if you feel unwell.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Other hazards

None known.

65% of the mixture consists of ingredients of unknown acute oral toxicity.

35% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt	Common Name
Methyloxirane, polymer with	67837-35-8	40 - 70	Oxirane, methyl-, polymer with oxirane,
oxirane, ether with 1,2,3-			ether with 1,2,3-propanetriol (3:1),
propanetriol (3:1), polymer with			polymer with 1,1'-methylenebis[4-
1,1'-methylenebis[4-			isocyanatocyclohexane]
isocyanatocyclohexane]			
Dicyclohexylmethane-4,4'-	5124-30-1	15 - 40 Trade Secret *	Cyclohexane, 1,1'-methylenebis[4-
Diisocyanate (HMDI)			isocyanato-
1,1'-	26447-40-5	3 - 7 Trade Secret *	Benzene, 1,1'-methylenebis[isocyanato-
Methylenebis(Isocyanatobenzen			
e)			
Benzene, 1,1'-	39310-05-9	1 - 5	Benzene, 1,1'-methylenebis[isocyanato-,
Methylenebis[isocyanato-,			homopolymer
Homopolymer			
Urethane Prepolymer	Trade Secret	1 - 5	Not Applicable
Carbon Black	1333-86-4	0.1 - 1.0 Trade Secret *	Carbon black
Chromium	7440-47-3	< 0.019	Chromium

Urethane Prepolymer is a non-hazardous Trade Secret material according to WHMIS criteria.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

^{*}The actual concentration of this ingredient has been withheld as a trade secret.

Hazardous Decomposition or By-Products

SubstanceConditionAldehydesDuring CombustionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionHydrogen CyanideDuring CombustionOxides of NitrogenDuring CombustionToxic Vapor, Gas, ParticulateDuring Combustion

5.3. Special protective actions for fire-fighters

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water

6.3. Methods and material for containment and cleaning up

Contain spill. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. 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. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from heat. Store away from acids. Store away from strong bases.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available

for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Carbon Black	1333-86-4	ACGIH	TWA(inhalable fraction):3	
			mg/m3	
Dicyclohexylmethane-4,4'-	5124-30-1	ACGIH	TWA:0.005 ppm	
Diisocyanate (HMDI)				
Chromium	7440-47-3	ACGIH	TWA(as Cr(0), inhalable	
			fraction):0.5 mg/m3	

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Butyl Rubber

Fluoroelastomer

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Butyl rubber

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

 	į	Julius Caracata Caracata Factor		
Physical state			Liq	uid

Specific Physical Form:	Viscous
Colour	Black
Odour	Low Odour, Odourless
Odour threshold	No Data Available
рН	Not Applicable
Melting point/Freezing point	No Data Available
Boiling point	>=204.4 °C
Flash Point	>=143.3 °C [Test Method: Tagliabue Closed Cup]
Evaporation rate	<=1 [Details:Gels with exposure to humidity.]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	Not Applicable
Flammable Limits(UEL)	Not Applicable
Vapour Pressure	<=0 Pa [@ 20 °C]
Viscosity/Kinematic Viscosity Viscosity/Kinematic	>=1 [<i>Ref Std</i> :AIR=1]
Viscosity	
Density	1.04 g/ml
Relative density	1.04 [Ref Std:WATER=1]
Water solubility	Negligible
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	Not Applicable
Decomposition temperature	No Data Available
Viscosity/Kinematic Viscosity	1,400 - 2,000 mPa-s
Volatile Organic Compounds	0.2 % weight [Test Method:calculated per CARB title 2]
Volatile Organic Compounds	2 g/l [Test Method:calculated SCAQMD rule 443.1]
Percent volatile	0.17 % weight
VOC Less H2O & Exempt Solvents	2 g/l [Test Method:calculated SCAQMD rule 443.1]

Nanoparticles

This material contains nanoparticles.

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Water

Strong acids

Strong bases

Alcohols

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

10.6. Hazardous decomposition products

Substance
None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest. May cause additional health effects (see below).

Skin Contact:

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Carbon Black	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Inhalation-		No data available; calculated ATE >50 mg/l
	Vapor(4 hr)		
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Dicyclohexylmethane-4,4'-Diisocyanate (HMDI)	Dermal	Rabbit	LD50 > 10,000 mg/kg
Dicyclohexylmethane-4,4'-Diisocyanate (HMDI)	Inhalation-	Rat	LC50 0.434 mg/l
	Dust/Mist		
	(4 hours)		
Dicyclohexylmethane-4,4'-Diisocyanate (HMDI)	Ingestion	Rat	LD50 9,900 mg/kg
1,1'-Methylenebis(Isocyanatobenzene)	Dermal	Rabbit	LD50 > 5,000 mg/kg
1,1'-Methylenebis(Isocyanatobenzene)	Inhalation-	Rat	LC50 0.368 mg/l
	Dust/Mist		
	(4 hours)		
1,1'-Methylenebis(Isocyanatobenzene)	Ingestion	Rat	LD50 31,600 mg/kg
Benzene, 1,1'-Methylenebis[isocyanato-, Homopolymer	Dermal	Rabbit	LD50 > 5,000 mg/kg
Benzene, 1,1'-Methylenebis[isocyanato-, Homopolymer	Inhalation-	Rat	LC50 0.368 mg/l
	Dust/Mist		
	(4 hours)		
Benzene, 1,1'-Methylenebis[isocyanato-, Homopolymer	Ingestion	Rat	LD50 31,600 mg/kg
Carbon Black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon Black	Ingestion	Rat	LD50 > 8,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
1,1'-Methylenebis(Isocyanatobenzene)	official	Irritant
	classifica	
	tion	
Benzene, 1,1'-Methylenebis[isocyanato-, Homopolymer	official	Irritant
	classifica	
	tion	
Carbon Black	Rabbit	No significant irritation

Serious Eve Damage/Irritation

Serious Lyc Damage/HTRation		
Name	Species	Value
1,1'-Methylenebis(Isocyanatobenzene)	official	Severe irritant
	classifica	
	tion	
Benzene, 1,1'-Methylenebis[isocyanato-, Homopolymer	official	Severe irritant
	classifica	
	tion	
Carbon Black	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
1,1'-Methylenebis(Isocyanatobenzene)	official	Sensitizing
	classifica	
	tion	
Benzene, 1,1'-Methylenebis[isocyanato-, Homopolymer	official	Sensitizing
	classifica	
	tion	

Respiratory Sensitization

Name	Species	Value
1,1'-Methylenebis(Isocyanatobenzene)	Human	Sensitizing
Benzene, 1,1'-Methylenebis[isocyanato-, Homopolymer	Human	Sensitizing

Germ Cell Mutagenicity

Name	Route	Value	

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1,1'-Methylenebis(Isocyanatobenzene)	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
Benzene, 1,1'-Methylenebis[isocyanato-, Homopolymer	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
Carbon Black	In Vitro	Not mutagenic
Carbon Black	In vivo	Some positive data exist, but the data are not
		sufficient for classification

Carcinogenicity

curemogenery			
Name	Route	Species	Value
1,1'-Methylenebis(Isocyanatobenzene)	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Benzene, 1,1'-Methylenebis[isocyanato-, Homopolymer	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Carbon Black	Dermal	Mouse	Not carcinogenic
Carbon Black	Ingestion	Mouse	Not carcinogenic
Carbon Black	Inhalation	Rat	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

reproductive and/or Developmental Effects					
Name	Route	Value	Species	Test result	Exposure
					Duration
1,1'-Methylenebis(Isocyanatobenzene)	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesi s
Benzene, 1,1'-Methylenebis[isocyanato-, Homopolymer	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesi s

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Specific Target Organ	<u> </u>	, , , , , , , , , , , , , , , , , , , 				
Name	Route	Target Organ(s)	Value	Species	Test result	Exposure
		0 0 0,		_		Duration
1,1'-	Inhalation	respiratory irritation	May cause respiratory irritation	official	NOAEL Not	
Methylenebis(Isocyanatobe				classifica	available	
nzene)				tion		
Benzene, 1,1'-	Inhalation	respiratory irritation	May cause respiratory irritation	official	NOAEL Not	
Methylenebis[isocyanato-,				classifica	available	
Homopolymer				tion		

Specific Target Organ Toxicity - repeated exposure

specific Target Organ Toxicity - repeated exposure						
Name	Route	ute Target Organ(s) Value		Species	Test result	Exposure
						Duration
1,1'-	Inhalation	respiratory system	Causes damage to organs through	Rat	LOAEL	13 weeks
Methylenebis(Isocyanatobe			prolonged or repeated exposure		0.004 mg/l	
nzene)						
Benzene, 1,1'-	Inhalation	respiratory system	Causes damage to organs through	Rat	LOAEL	13 weeks
Methylenebis[isocyanato-,			prolonged or repeated exposure		0.004 mg/l	
Homopolymer						
Carbon Black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not	occupational
		1			available	exposure

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

No data available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for Canadian ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

SECTION 16: Other information

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.

Health: 2 Flammability: 1 Instability: 1 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.

HMIS Hazard Classification

Health: *2 Flammability: 1 Physical Hazard: 1 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. The manufacturer MAKES NO WARRANTIES, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF PERFORMANCE, COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M Canada SDSs are available at www.3M.ca

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Safety Data Sheet

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 6.00

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 2017/07/12

This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Regulations.

SECTION 1: Identification

1.1. Product identifier

3MTM Controlled-Flow Seam Sealer PN 08329 (Part B)

1.2. Recommended use and restrictions on use

Intended Use

Sealant

Restrictions on use

Not applicable

1.3. Supplier's details

Company: 3M Canada Company **Division:** Automotive Aftermarket

Address: 1840 Oxford Street East, Post Office Box 5757, London, Ontario N6A 4T1

Telephone: (800) 364-3577 **Website:** www.3M.ca

1.4. Emergency telephone number

Medical Emergency Telephone: (519) 451-2500, Ext. 2222; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2.

Skin Sensitizer: Category 1.

Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Exclamation mark | Health Hazard |

Pictograms



Hazard statements

Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction.

Causes damage to organs through prolonged or repeated exposure: liver

May cause damage to organs through prolonged or repeated exposure: endocrine system

Precautionary statements

General:

Keep out of reach of children. Read label before use. If medical advice is needed, have product container or label at hand.

Prevention:

Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Get medical advice/attention if you feel unwell.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt	Common Name
Polyether Polyol	9082-00-2	60 - 100	Oxirane, methyl-, polymer with oxirane,
			ether with 1,2,3-propanetriol (3:1)
Diethyltoluenediamine	68479-98-1	10 - 30 Trade Secret *	Benzenediamine, ar,ar-diethyl-ar-methyl-
Propoxylated	25723-16-4	3 - 13	Poly[oxy(methyl-1,2-ethanediyl)], .alpha
Trimethylolpropane			hydroomegahydroxy-, ether with 2-
			ethyl-2-(hydroxymethyl)-1,3-propanediol
			(3:1)
M-xylene-alpha,alpha'-diamine	1477-55-0	1 - 5 Trade Secret *	1,3-Benzenedimethanamine

^{*}The actual concentration of this ingredient has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance
Carbon monoxide
Carbon dioxide
Oxides of Nitrogen

Condition

During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. 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. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate

solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid breathing of dust created by cutting, sanding, grinding or machining. Keep out of reach of children. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
M-xylene-alpha,alpha'-diamine	1477-55-0	ACGIH	CEIL:0.1 mg/m3	SKIN

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an

exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Specific Physical Form:

Appearance/Odour

Odour threshold

pH

Not Applicable

Melting point/Freezing point

Liquid

Viscous

Orange-Yellow.

No Data Available

No Data Available

Boiling point >=210 °C

Flash Point >=143.3 °C [Test Method: Tagliabue Closed Cup]

Evaporation rate <=1 [*Ref Std*:WATER=1]

Flammability (solid, gas)

Flammable Limits(LEL)

Flammable Limits(UEL)

Vapour Pressure

Vapour Density

Not Applicable

Not Applicable

Not Applicable

Not Applicable

Not Applicable

Not Applicable

Density 1.03 g/ml

Relative density 1.03 [*Ref Std*:WATER=1]

Water solubilityNegligibleSolubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNot ApplicableDecomposition temperatureNo Data AvailableViscosity1,200 - 1,700 mPa-s

Volatile Organic Compounds

0 g/l [Test Method: calculated SCAQMD rule 443.1]

Volatile Organic Compounds

0 % weight [Test Method: calculated per CARB title 2]

Percent volatile 0 % weight [*Test Method:* Estimated]

VOC Less H2O & Exempt Solvents 0 g/l [Test Method:calculated SCAQMD rule 443.1]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong acids

Strong oxidizing agents

10.6. Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

May be harmful if swallowed. Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. May cause additional health effects (see below).

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice. Endocrine Effects: Signs/symptoms may include disruption of gonadal, thyroid, adrenal, or pancreatic function; changes in hormone production; alterations in circulating hormone levels; and/or changes in tissue response to hormones.

Additional Information:

Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines. Increased numbers of tumors in the liver, thyroid, and possibly the mammary glands were observed in rats given DETDA (CAS No. 68479-98-1) in their diet for two years.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or

the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
Polyether Polyol	Dermal	Rabbit	LD50 > 5,000 mg/kg
Polyether Polyol	Ingestion	Rat	LD50 > 10,000 mg/kg
Diethyltoluenediamine	Dermal	Rat	LD50 > 2,000 mg/kg
Diethyltoluenediamine	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.61 mg/l
Diethyltoluenediamine	Ingestion	Rat	LD50 472 mg/kg
Propoxylated Trimethylolpropane	Dermal	Rat	LD50 > 2,000 mg/kg
Propoxylated Trimethylolpropane	Ingestion	Rat	LD50 > 2,500 mg/kg
M-xylene-alpha,alpha'-diamine	Dermal	Rabbit	LD50 > 2,000 mg/kg
M-xylene-alpha,alpha'-diamine	Inhalation- Dust/Mist (4 hours)	Rat	LC50 1.2 mg/l
M-xylene-alpha,alpha'-diamine	Ingestion	Rat	LD50 980 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Diethyltoluenediamine	Rabbit	No significant irritation
Propoxylated Trimethylolpropane	Rabbit	No significant irritation
M-xylene-alpha,alpha'-diamine	Rat	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Diethyltoluenediamine	Rabbit	Severe irritant
Propoxylated Trimethylolpropane	Rabbit	Mild irritant
M-xylene-alpha,alpha'-diamine	Rabbit	Corrosive

Skin Sensitization

~						
Name	Species	Value				
Diethyltoluenediamine	Human	Not classified				
M-xylene-alpha,alpha'-diamine	Guinea	Sensitizing				
	nio					

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Ser in Cen Municip					
Name	Route	Value			
Diethyltoluenediamine	In Vitro	Some positive data exist, but the data are not sufficient for classification			
Diethyltoluenediamine	In vivo	Some positive data exist, but the data are not sufficient for classification			
M-xylene-alpha,alpha'-diamine	In Vitro	Not mutagenic			
M-xylene-alpha,alpha'-diamine	In vivo	Not mutagenic			

Carcinogenicity

Name	Route	Species	Value
Diethyltoluenediamine	Ingestion	Rat	Some positive data exist, but the data are not
			sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure
					Duration
M-xylene-alpha,alpha'-diamine	Ingestion	Not classified for female reproduction	Rat	NOAEL 450 mg/kg/day	1 generation
M-xylene-alpha,alpha'-diamine	Ingestion	Not classified for male reproduction	Rat	NOAEL 450 mg/kg	1 generation
M-xylene-alpha,alpha'-diamine	Ingestion	Not classified for development	Rat	NOAEL 450 mg/kg/day	1 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
M-xylene-alpha,alpha'- diamine	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Not available	NOAEL Not avaliable	
			classification			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Diethyltoluenediamine	Ingestion	liver	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/kg/day	24 months
Diethyltoluenediamine	Ingestion	endocrine system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 1.4 mg/kg/day	24 months
Diethyltoluenediamine	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2.8 mg/kg/day	24 months
Diethyltoluenediamine	Ingestion	eyes	Not classified	Rat	NOAEL 1.4 mg/kg/day	24 months
Diethyltoluenediamine	Ingestion	heart skin bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system respiratory system	Not classified	Rat	NOAEL 3.5 mg/kg/day	24 months
M-xylene-alpha,alpha'- diamine	Ingestion	endocrine system blood bone marrow	Not classified	Rat	NOAEL 600 mg/kg/day	28 days

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

No data available.

SECTION 13: Disposal considerations

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for Canadian ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA.

SECTION 16: Other information

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.

Health: 2 Flammability: 1 Instability: 1 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.

HMIS Hazard Classification

Health: 2 Flammability: 1 Physical Hazard: 1 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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