

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

3M Scotchkote Urethane Elastomer 80EG 531 (Part A)

Product Identification Numbers

GR-2001-3319-1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Coating.

1.3. Details of the supplier of the substance or mixture

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

E Mail: tox.uk@mmm.com Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

This material is not classified as hazardous according to Regulation (EC) No. 1272/2008, as amended, on classification, labelling, and packaging of substances and mixtures.

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

This product is not classified as hazardous according to EU Directive 1999/45/EC.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

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Not applicable

SUPPLEMENTAL INFORMATION

Supplemental Hazard Statements:

EUH210 Safety data sheet available on request.

EUH208 Contains m-tolylidene diisocyanate. May produce an allergic reaction.

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Not applicable

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Polyurethane	Trade Secret		80 - 100	
Dimethyl siloxane, reaction product with	67762-90-7		5 - 10	
silica				
m-tolylidene diisocyanate	26471-62-5	EINECS 247-	< 0.1	Carc.Cat.3:R40; T+:R26;
		722-4		Xi:R36-37-38; R42-43; R52/53
				(EU)
				Acute Tox. 1, H330; Skin Irrit.
				2, H315; Eye Irrit. 2, H319;
				Resp. Sens. 1A, H334; Skin
				Sens. 1A, H317; Carc. 2, H351;
				STOT SE 3, H335; Aquatic
				Chronic 3, H412 - Nota C (CLP)

Please see section 16 for the full text of any R phrases and H statements referred to in this section Please refer to section 15 for the any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

No need for first aid is anticipated.

Skin contact

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, 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

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. 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.

Hydrogen cyanide.

Oxides of nitrogen.

Condition

During combustion.

During combustion.

During combustion.

During combustion.

5.3. Advice for fire-fighters

No unusual fire or explosion hazards are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate the area with fresh air. Observe precautions from other sections.

6.2. Environmental precautions

Avoid release to the environment.

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 authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from acids. Store away from strong bases. Store away from oxidising agents.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Free isocyanates	26471-62-5	Manufacturer	TWA:0.005 ppm;STEL:0.02	
		determined	ppm	
Free isocyanates	26471-62-5	Health and	TWA(as NCO):0.02	Respiratory Sensitizer
		Safety Comm.	mg/m3;STEL(as NCO):0.07	
		(UK)	mg/m3	
Silicon dioxide	67762-90-7	Health and	TWA(as inhalable dust):6	
		Safety Comm.	mg/m3;TWA(as respirable	
		(UK)	dust):2.4 mg/m3	

Health and Safety Comm. (UK): UK Health and Safety Commission

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

CEIL: Ceiling

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

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

None required.

Skin/hand protection

No chemical protective gloves are required.

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 Liquid.
Specific Physical Form: Paste

Appearance/Odour Odourless; Yellowish colour

Odour threshold

pH

No data available.

Not applicable.

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Boiling point/boiling range>=250 °CMelting pointNot applicable.Flammability (solid, gas)Not applicable.Explosive propertiesNot classifiedOxidising propertiesNot classified

Flash point >=160 °C [Test Method:Closed Cup]

Autoignition temperature >=400 °C

Flammable Limits(LEL)

Flammable Limits(UEL)

Vapour pressure

No data available.

No data available.

<=100 Pa [@ 21 °C]

Relative density 1.095

Water solubility Negligible

Solubility- non-water Nil

Partition coefficient: n-octanol/water

Evaporation rate

No data available.

No data available.

No data available.

No data available.

Decomposition temperatureNo data available.ViscosityNo data available.Density1.095 g/ml

9.2. Other information

Volatile organic compounds (VOC) 2 g/l [Test Method: Estimated] [Details: EU Definition (Part A

and B mix)]

Percent volatile 0 %

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 polymerisation will not occur.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Accelerators

Alcohols.

Amines.

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

Strong acids.

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Strong bases.

Strong oxidising agents.

10.6 Hazardous decomposition products

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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 labelling, 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

Vapours released during curing may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin contact

Contact with the skin during product use is not expected to result in significant irritation.

Eye contact

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion

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

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 ATE >5,000 mg/kg
Dimethyl siloxane, reaction product with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Dimethyl siloxane, reaction product with silica	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		
	(4 hours)		
Dimethyl siloxane, reaction product with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
m-tolylidene diisocyanate	Inhalation-	Mouse	LC50 0.12 mg/l
	Vapor (4		
	hours)		
m-tolylidene diisocyanate	Dermal	Rabbit	LD50 > 9,400 mg/kg
m-tolylidene diisocyanate	Inhalation-	Rat	LC50 0.35 mg/l
	Dust/Mist		
	(4 hours)		
m-tolylidene diisocyanate	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name		Value
Dimethyl siloxane, reaction product with silica	Rabbit	No significant irritation

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m-tolylidene diisocyanate	Rabbit	Irritant
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Serious Eye Damage/Irritation

Name	Species	Value
Dimethyl siloxane, reaction product with silica	Rabbit	No significant irritation
m-tolylidene diisocyanate	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
Dimethyl siloxane, reaction product with silica	Human	Not sensitizing
	and	
	animal	
m-tolylidene diisocyanate	Human	Sensitising
	and	
	animal	

Respiratory Sensitisation

Name	Species	Value
m-tolylidene diisocyanate	Human	Sensitising

Germ Cell Mutagenicity

Name	Route	Value
Dimethyl siloxane, reaction product with silica	In Vitro	Not mutagenic
m-tolylidene diisocyanate	In Vitro	Some positive data exist, but the data are not
		sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Dimethyl siloxane, reaction product with silica	Not	Mouse	Some positive data exist, but the data are not
	specified.		sufficient for classification
m-tolylidene diisocyanate	Inhalation	Human	Not carcinogenic
		and	
		animal	
m-tolylidene diisocyanate	Ingestion	Multiple	Carcinogenic.
		animal	
		species	

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Dimethyl siloxane, reaction product with silica	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Dimethyl siloxane, reaction product with silica	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Dimethyl siloxane, reaction product with silica	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
m-tolylidene diisocyanate	Inhalation	Not toxic to female reproduction	Rat	NOAEL .002 mg/l	2 generation
m-tolylidene diisocyanate	Inhalation	Not toxic to male reproduction	Rat	NOAEL .002 mg/l	2 generation
m-tolylidene diisocyanate	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL .004 mg/l	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

specific Target Organ Toxicity - single exposure							
Name	Route	Target Organ(s)	Value	Species	Test result	Exposure	
						Duration	
m-tolylidene diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not	occupational	
					available	exposure	

Specific Target Organ Toxicity - repeated exposure

rotation and a second a second and a second							
Name	Route	Target Organ(s)	Value	Species	Test result	Exposure	
						Duration	
Dimethyl siloxane,	Inhalation	respiratory system	All data are negative	Human	NOAEL Not	occupational	
reaction product with silica		silicosis	_		available	exposure	
m-tolylidene diisocyanate	Inhalation	respiratory system	Causes damage to organs through	Human	NOAEL	occupational	
•			prolonged or repeated exposure		.000006 mg/l	exposure	

Aspiration Hazard

Name	Value

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

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Dimethyl	67762-90-7		Data not			
siloxane,			available or			
reaction			insufficient for			
product with			classification			
silica						
m-tolylidene	26471-62-5	Water flea	Experimental	48 hours	EC50	1.6 mg/l
diisocyanate						
m-tolylidene	26471-62-5	Zebra Fish	Experimental	96 hours	LC50	392 mg/l
diisocyanate						
m-tolylidene	26471-62-5	Green Algae	Experimental	96 hours	EC50	9.54 mg/l
diisocyanate						
m-tolylidene	26471-62-5	Ricefish	Experimental	28 days	NOEC	40.3 mg/l
diisocyanate						
m-tolylidene	26471-62-5	Crustacea	Experimental	14 days	NOEC	0.8 mg/l
diisocyanate						

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
m-tolylidene	26471-62-5	Experimental		Photolytic half-	4.27 days (t	Other methods
diisocyanate		Photolysis		life (in air)	1/2)	
Dimethyl siloxane, reaction product with silica	67762-90-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
	26451 62.5	D	1 4 1	DOD	0.0/ 1.1	OF CD ANIC NOTE
m-tolylidene	26471-62-5	Experimental	14 days	BOD	0 % weight	OECD 301C - MITI

diisocyanate		Biodegradation			test (I)
m-tolylidene	26471-62-5	Experimental	Hydrolytic	5 days (t 1/2)	Other methods
diisocyanate		Hydrolysis	half-life		

12.3: Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Dimethyl siloxane, reaction product with silica	67762-90-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
m-tolylidene diisocyanate	26471-62-5	Experimental BCF-Carp	42 days	Bioaccumulati on factor	<50	OECD 305C- Bioaccum degree fish

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

This product has been classified as a non-hazardous waste. Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty and clean product containers may be disposed as non-hazardous waste. Consult your specific regulations and service providers to determine available options and requirements.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

080199 Wastes not otherwise specified

SECTION 14: Transportation information

GR-2001-3319-1

Not hazardous for transportation

SECTION 15: Regulatory information

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

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Carcinogenicity

<u>Ingredient</u>	CAS Nbr	<u>Classification</u>	Regulation
m-tolylidene diisocyanate	26471-62-5	Carc. 2	Regulation (EC) No.
			1272/2008, Table 3.1
m-tolylidene diisocyanate	26471-62-5	Carc.Cat.3	Regulation (EC) No.
			1272/2008, Table 3.2
m-tolylidene diisocyanate	26471-62-5	Grp. 2B: Possible human	International Agency
		carc.	for Research on Cancer

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of the Korean Toxic Chemical 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 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.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H412	Harmful to aquatic life with long lasting effects.

List of relevant R-phrases

K26	very toxic by innaiation.
R36	Irritating to eyes.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R40	Limited evidence of a carcinogenic effect.
R42	May cause sensitisation by inhalation.
R43	May cause sensitisation by skin contact.
R52/53	Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Revision information:

Revision Changes:

Section 15: Carcinogenicity information information was modified.

Section 3: Composition/ Information of ingredients table information was modified.

Section 9: Relative density information information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

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Section 12:Bioccumulative potential information information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Carcinogenicity Table information was modified.

Section 11: Serious Eye Damage/Irritation Table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Skin Sensitization Table information was modified.

Section 11: Respiratory Sensitization Table information was modified.

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Skin Corrosion/Irritation Table information was modified.

Section 11: Target Organs - Repeated Table information was modified.

Section 11: Target Organs - Single Table information was modified.

Section 8: Respiratory protection - recommended respirators information information was added.

Section 8: Respiratory protection - recommended respirators guide information was added.

Label: CLP Classification - Header information was added.

Label: CLP Classification information was added.

Label: CLP Supplemental Hazard Statements information was added.

Label: CLP Supplemental Hazard Statements - Header information was added.

Label: CLP Supplemental Information - Header information was added.

Contains statement for sensitizers information was added.

Contains statement for sensitizers information was added.

Contains statement for sensitizers information was added.

Section 8: OEL table agency column heading information was added.

Section 8: OEL table limit type column heading information was added.

OEL Ceiling Heading information was added.

Section 8: Occupational exposure limit table information was added.

Section 8: OEL table Ingredient column heading information was added.

Section 8: OEL table Additional Comments column heading information was added.

OEL Reg Agency Desc information was added.

Section 8: TWA key information was added.

Section 8: STEL key information was added.

Section 8: OEL table CAS No Column heading information was added.

Section 2: 2.2 & 2.3. CLP REGULATION heading information was added.

Section 8: Personal Protection - Respiratory Information information was added.

Section 09: Solubility as text (non-water) information was added.

Not applicable information was added.

Not applicable information was added.

Section 8: 8.1.1 Biological limit values table heading information was added.

Section 8: BLV information was added.

List of sensitizers information was added.

Section 2: Contains heading information was deleted.

Section 2: Safety phrases heading information was deleted.

Section 2: Risk phrases heading information was deleted.

Section 15: Symbol information information was deleted.

Section 8: Respiratory protection information information was deleted.

Section 2: Label ingredient information information was deleted.

Section 8: Occupational exposure limit table information was deleted.

Risk phrase - None information was deleted.

Section 9: Solubility (non-water) information was deleted.

Label: Graphic information was deleted.

Section 02: Graphic information information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

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3M Scotchkote Urethane Elastomer 80EG 531 (Part A)	
3M United Kingdom MSDSs are available at www.3M.com/uk	
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