Safety Data Sheet

Document group:	28-7721-5	**Version number:**	4.00
Revision date:	02/12/2014	**Supersedes date:**	06/08/2013

Transportation version number: 1.00 (01/10/2010)

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 Coating PU 846, RAL9010

Product Identification Numbers
GR-2001-3395-1

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.
Telephone: +44 (0)1344 858 000
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:
Flammable Liquid, Category 3 - Flam. Liq. 3; H226
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334
Skin Sensitization, Category 1B - Skin Sens. 1B; H317
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

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

Indication of danger
Flammable; R10
Sensitizing; R42/43
Dangerous for the environment; N; R51/53

For full text of R phrases, see Section 16.

2.2. Label elements
CLP REGULATION (EC) No 1272/2008

SIGNAL WORD
DANGER!

Symbols:
GHS02 (Flame) |GHS07 (Exclamation mark) | GHS08 (Health Hazard) |GHS09 (Environment) |

Pictograms

Ingredient	CAS Nbr	% by Wt
Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-oxepanone	426822-87-9	20 - 30
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	53880-05-0	5 - 15
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	140921-24-0	1 - 10
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8	1 - 5
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate	76977-79-2	< 1
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	< 1
2-octyl-2H-isothiazol-3-one	26530-20-1	< 0.025

HAZARD STATEMENTS:

H315	Causes skin irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H226	Flammable liquid and vapour.
H411	Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P210A	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260E	Do not breathe vapour or spray.
P262	Do not get in eyes, on skin, or on clothing.
P284A	In case of inadequate ventilation wear respiratory protection.
P280E	Wear protective gloves.
P273	Avoid release to the environment.

Response:

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P331	Do NOT induce vomiting.

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P370 + P378G	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

59% of the mixture consists of components of unknown acute dermal toxicity.
52% of the mixture consists of components of unknown acute inhalation toxicity.
Contains 49% of components with unknown hazards to the aquatic environment.

Notes on labelling

Nota P applied to CAS #64742-95-6.

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

Symbol(s)


Harmful


Dangerous for the environment

Contains:
2-ethylhexyl (6-isocyanatohexyl)-carbamate; 1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate; Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-oxepanone; 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers

Risk phrases

R10	Flammable.
R42/43	May cause sensitisation by inhalation and skin contact.
R51/53	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Safety phrases

S23C	Do not breathe vapour or spray.
S51	Use only in well ventilated areas.
S24	Avoid contact with skin.
S37	Wear suitable gloves.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S62	If swallowed, do not induce vomiting: Seek medical advice immediately and show this container or label.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

Special provisions concerning the labelling of certain substances

Contains isocyanates. See information supplied by manufacturer.

Notes on labelling

Nota P applied to CAS #64742-95-6.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-oxepanone	426822-87-9		20 - 30	R43 (Vendor) Skin Sens. 1, H317 (Vendor)
Barium Sulfate	7727-43-7	EINECS 231-784-4	20 - 30	
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	53880-05-0	NLP 500-125-5	5 - 15	Xi:R37; R43 (Vendor) Skin Sens. 1, H317 (Vendor)
Ethyl 3-ethoxypropionate	763-69-9	EINECS 212-112-9	1 - 10	R52 (Self Classified) Flam. Liq. 3, H226 (Self Classified)
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	140921-24-0	EINECS 411-700-4	1 - 10	R43 (EU) Skin Sens. 1, H317 (CLP)
2-Methoxy-1-methylethyl acetate	108-65-6	EINECS 203-603-9	1 - 10	R10 (EU) Flam. Liq. 3, H226 (CLP)
Titanium dioxide	13463-67-7	EINECS 236-675-5	1 - 10	
Non-Hazardous Ingredients	Mixture		1 - 5	
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8	EINECS 247-735-5	1 - 5	Xi:R38; R42-43 (Vendor) Resp. Sens. 1, H334; Skin Sens. 1B, H317 (Vendor)
1,2,4-Trimethylbenzene	95-63-6	EINECS 202-436-9	1 - 5	Xn:R20; Xi:R36-37-38; N:R51/53; R10 (EU) Flam. Liq. 3, H226; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 2, H411 (CLP)
Dimethyl siloxane, reaction product with silica	67762-90-7		1 - 5	
Solvent naphtha (petroleum), light aromatic	64742-95-6	EINECS 265-199-0	1 - 5	Xn:R65 - Nota 4,P (EU) R10 (Vendor) Xi:R38; R67 (Self Classified) Asp. Tox. 1, H304 - Nota P (CLP) Flam. Liq. 3, H226 (Vendor) Skin Irrit. 2, H315; STOT SE 3, H336 (Self Classified)
Xylene	1330-20-7	EINECS 215-535-7	1 - 5	Xn:R20-21; Xi:R38; R10 - Nota C (EU)

				Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315 - Nota C (CLP)
7-Oxa-3,20-diazadispiro[5.1.11.2]heneicosane-20-propanoic acid, 2,2,4,4-tetramethyl-21-oxo-, dodecyl ester	85099-51-0		< 1	N:R51/53 (Self Classified)
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate	76977-79-2	EINECS 278-583-8	< 1	Xi:R38; R43 (Vendor) Skin Sens. 1, H317 (Vendor)
Distillates (petroleum), hydrotreated light	64742-47-8	EINECS 265-149-8	< 1	Xn:R65 - Nota 4 (EU) R10; R66; R67 (Self Classified) Asp. Tox. 1, H304 (CLP) Flam. Liq. 3, H226; STOT SE 3, H336; EUH066 (Self Classified)
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	EINECS 223-861-6	< 1	T:R23; Xi:R36-37-38; N:R51/53; R42-43 - Nota 2 (EU) Acute Tox. 1, H330; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 2, H411 - Nota 2 (CLP)
Ethylbenzene	100-41-4	EINECS 202-849-4	< 1	F:R11; Xn:R20-48/20; Xn:R65 (EU) R52 (Self Classified) Flam. Liq. 2, H225; Acute Tox. 4, H332; Asp. Tox. 1, H304; STOT RE 2, H373 (CLP)
Hexamethylene diisocyanate	822-06-0	EINECS 212-485-8	< 0.5	T:R23; Xi:R36-37-38; R42-43 - Nota 2 (EU) R52 (Self Classified) Acute Tox. 2, H330; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1A, H334; Skin Sens. 1A, H317; STOT SE 3, H335 - Nota 2 (CLP)
2-octyl-2H-isothiazol-3-one	26530-20-1	EINECS 247-761-7	< 0.025	T:R23-24; C:R34; Xn:R22; N:R50/53; R43 (EU) Acute Tox. 3, H331; Acute Tox. 3, H311; Acute Tox. 4, H302; Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Acute 1, H400,M=10; Aquatic Chronic 1, H410,M=10 (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
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 for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately 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. Extinguishing media
In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture
Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance	Condition
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Hydrogen cyanide.	During combustion.
Oxides of nitrogen.	During combustion.

5.3. Advice for fire-fighters
Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Eliminate all ignition sources if safe to do so. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. Warning: A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. 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 dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up
Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. 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 using non-sparking tools. Place in a metal 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. 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 use in a confined area with minimal air exchange. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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 oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (eg. gloves, respirators…) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from acids. Store away from oxidising agents. Store away from amines.

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
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	CAS Nbr	Agency	Limit type	Additional comments
Ethylbenzene	100-41-4	UK HSC	TWA:441 mg/m3(100 ppm);STEL:552 mg/m3(125 ppm)	Skin Notation
2-Methoxy-1-methylethyl acetate	108-65-6	UK HSC	TWA:274 mg/m3(50 ppm);STEL:548 mg/m3(100 ppm)	Skin Notation
Xylene	1330-20-7	UK HSC	TWA:220 mg/m3(50	Skin Notation

			ppm);STEL:441 mg/m3(100 ppm)	
Titanium dioxide	13463-67-7	UK HSC	TWA(Inhalable):10 mg/m3;TWA(respirable):4 mg/m³	
Free isocyanates	4098-71-9	Manufacturer determined	TWA:0.005 ppm;STEL:0.02 ppm	
Free isocyanates	4098-71-9	UK HSC	TWA(as NCO):0.02 mg/m3;STEL(as NCO):0.07 mg/m3	Respiratory Sensitizer
Barium Sulfate	7727-43-7	UK HSC	TWA(as inhalable dust):10 mg/m³;TWA(as respirable dust):4 mg/m³	
Free isocyanates	822-06-0	Manufacturer determined	TWA:0.005 ppm;STEL:0.02 ppm	
Free isocyanates	822-06-0	UK HSC	TWA(as NCO):0.02 mg/m3;STEL(as NCO):0.07 mg/m3	Respiratory Sensitizer
Benzene, trimethyl-	95-63-6	UK HSC	TWA:125 mg/m3(25 ppm)	

UK HSC : UK Health and Safety Commission
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

Biological limit values

Ingredient	CAS Nbr	Agency	Determinant	Biological Specimen	Sampling Time	Value	Additional comments
Xylene	1330-20-7	UK EH40 BMGVs	Methyl hippuric acid	Creatinine in urine	EOS	650 mmol/mol	

UK EH40 BMGVs : UK. EH40 Biological Monitoring Guidance Values (BMGVs)
EOS: End of shift.

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. Use explosion-proof ventilation 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
Gloves made from the following material(s) are recommended:

Material	Thickness (mm)	Breakthrough Time

Polyvinyl alcohol (PVA).	No data available	No data available
Polymer laminate	No data available	No data available

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	Liquid.
Appearance/Odour	Aromatic solvent odour; Pale cream colour.
Odour threshold	*No data available.*
pH	*Not applicable.*
Boiling point/boiling range	>=120 ºC
Melting point	*Not applicable.*
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	40 ºC [*Test Method:*Closed Cup]
Autoignition temperature	>=315 ºC
Flammable Limits(LEL)	1 % volume
Flammable Limits(UEL)	10.8 % volume
Vapour pressure	1,199.9 Pa [@ 21 ºC]
Relative density	1.33 [*Ref Std:*WATER=1]
Water solubility	Negligible
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Evaporation rate	*No data available.*
Vapour density	*No data available.*
Decomposition temperature	*No data available.*
Viscosity	*No data available.*
Density	1.33 g/ml

9.2. Other information

Volatile organic compounds (VOC)	355 g/l [*Test Method:*Estimated] [*Details:*EU Definition]
Percent volatile	26.68 % weight

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
Sparks and/or flames.

10.5 Incompatible materials
Amines.
Strong oxidising 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 agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

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
Harmful if inhaled. 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 target organ effects after inhalation.

Skin contact
Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact
Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause target organ effects after ingestion.

Target Organ Effects:

Single exposure may cause:
Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Prolonged or repeated exposure may cause:
Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.

Carcinogenicity:
Contains a chemical or chemicals which can cause cancer.

Additional information:
Persons previously sensitised to isocyanates may develop a cross-sensitisation 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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE1 - 5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-oxepanone	Ingestion	Rat	LD50 > 5,000 mg/kg
Barium Sulfate	Ingestion	Rat	LD50 > 15,000 mg/kg
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.01 mg/l
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Ingestion	Rat	LD50 > 5,000 mg/kg
Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
2-Methoxy-1-methylethyl acetate	Dermal	Rabbit	LD50 > 5,000 mg/kg
2-Methoxy-1-methylethyl acetate	Inhalation-Vapor (4 hours)	Rat	LC50 > 28.8 mg/l
2-Methoxy-1-methylethyl acetate	Ingestion	Rat	LD50 8,532 mg/kg
Ethyl 3-ethoxypropionate	Dermal	Rabbit	LD50 4,080 mg/kg
Ethyl 3-ethoxypropionate	Inhalation-Vapor (4 hours)	Rat	LC50 > 14.4 mg/l
Ethyl 3-ethoxypropionate	Ingestion	Rat	LD50 3,200 mg/kg
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	Dermal		estimated to be > 5,000 mg/kg
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	Inhalation-Dust/Mist		estimated to be > 12.5 mg/l
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	Inhalation-Vapor		estimated to be > 50 mg/l
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	Ingestion		estimated to be > 5,000 mg/kg
1,2,4-Trimethylbenzene	Dermal	Rabbit	LD50 > 3,160 mg/kg
1,2,4-Trimethylbenzene	Inhalation-Vapor (4 hours)	Rat	LC50 18 mg/l
1,2,4-Trimethylbenzene	Ingestion	Rat	LD50 3,400 mg/kg
Solvent naphtha (petroleum), light aromatic	Dermal	Rabbit	LD50 > 2,000 mg/kg
Solvent naphtha (petroleum), light aromatic	Inhalation-Vapor (4 hours)	Rat	LC50 > 5.2 mg/l
Solvent naphtha (petroleum), light aromatic	Ingestion	Rat	LD50 > 5,000 mg/kg
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Ingestion	Rat	LD50 > 2,500 mg/kg
Xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
Xylene	Inhalation-Vapor (4 hours)	Rat	LC50 29 mg/l

Xylene	Ingestion	Rat	LD50 3,523 mg/kg
Dimethyl siloxane, reaction product with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Dimethyl siloxane, reaction product with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Dimethyl siloxane, reaction product with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
Ethylbenzene	Inhalation-Vapor (4 hours)	Rat	LC50 17.4 mg/l
Ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg
Distillates (petroleum), hydrotreated light	Dermal	Rabbit	LD50 > 3,160 mg/kg
Distillates (petroleum), hydrotreated light	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 3.0 mg/l
Distillates (petroleum), hydrotreated light	Ingestion	Rat	LD50 > 5,000 mg/kg
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Dermal	Rat	LD50 > 7,000 mg/kg
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.03 mg/l
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Ingestion	Rat	LD50 4,815 mg/kg
Hexamethylene diisocyanate	Dermal	Rabbit	LD50 570 mg/kg
Hexamethylene diisocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.12 mg/l
Hexamethylene diisocyanate	Ingestion	Rat	LD50 710 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-oxepanone	Rabbit	Minimal irritation
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Rabbit	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
2-Methoxy-1-methylethyl acetate	Rabbit	No significant irritation
Ethyl 3-ethoxypropionate	Rabbit	No significant irritation
1,2,4-Trimethylbenzene	Rabbit	Irritant
Solvent naphtha (petroleum), light aromatic	Rabbit	Irritant
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Rabbit	Mild irritant
Xylene	Rabbit	Mild irritant
Dimethyl siloxane, reaction product with silica	Rabbit	No significant irritation
Ethylbenzene	Rabbit	Mild irritant
Distillates (petroleum), hydrotreated light	Rabbit	Mild irritant
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate		Mild irritant
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Rabbit	Corrosive
Hexamethylene diisocyanate	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-oxepanone	Rabbit	No significant irritation
Barium Sulfate	Rabbit	No significant irritation
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Rabbit	Mild irritant
Titanium dioxide	Rabbit	No significant irritation
2-Methoxy-1-methylethyl acetate	Rabbit	Mild irritant
Ethyl 3-ethoxypropionate	Rabbit	Mild irritant
1,2,4-Trimethylbenzene	Rabbit	Mild irritant
Solvent naphtha (petroleum), light aromatic	Rabbit	Mild irritant
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Rabbit	No significant irritation
Xylene	Rabbit	Mild irritant
Dimethyl siloxane, reaction product with silica	Rabbit	No significant irritation
Ethylbenzene	Rabbit	Moderate irritant
Distillates (petroleum), hydrotreated light	Rabbit	Mild irritant
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Rabbit	Corrosive
Hexamethylene diisocyanate	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-oxepanone	Mouse	Sensitising
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Guinea pig	Sensitising
Titanium dioxide	Human and animal	Not sensitizing
2-Methoxy-1-methylethyl acetate	Guinea pig	Not sensitizing
Ethyl 3-ethoxypropionate	Guinea pig	Not sensitizing
1,2,4-Trimethylbenzene	Guinea pig	Not sensitizing
Solvent naphtha (petroleum), light aromatic	Guinea pig	Not sensitizing
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Mouse	Sensitising
Dimethyl siloxane, reaction product with silica	Human and animal	Not sensitizing
Ethylbenzene	Human	Not sensitizing
Distillates (petroleum), hydrotreated light	Guinea pig	Not sensitizing
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate		Sensitising
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Guinea pig	Sensitising
Hexamethylene diisocyanate	Multiple animal species	Sensitising

Respiratory Sensitisation

Name	Species	Value
2-ethylhexyl (6-isocyanatohexyl)-carbamate		Sensitising
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Human	Sensitising
Hexamethylene diisocyanate	Human and animal	Sensitising

Germ Cell Mutagenicity

Name	Route	Value
Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-oxepanone	In Vitro	Not mutagenic
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	In Vitro	Not mutagenic
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
2-Methoxy-1-methylethyl acetate	In Vitro	Not mutagenic
Ethyl 3-ethoxypropionate	In Vitro	Not mutagenic
1,2,4-Trimethylbenzene	In Vitro	Not mutagenic
2-ethylhexyl (6-isocyanatohexyl)-carbamate	In Vitro	Not mutagenic
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
Dimethyl siloxane, reaction product with silica	In Vitro	Not mutagenic
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
Distillates (petroleum), hydrotreated light	In Vitro	Not mutagenic
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	In vivo	Not mutagenic
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Hexamethylene diisocyanate	In Vitro	Not mutagenic
Hexamethylene diisocyanate	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Titanium dioxide	Ingestion	Multiple	Not carcinogenic

		animal species	
Titanium dioxide	Inhalation	Rat	Carcinogenic.
Solvent naphtha (petroleum), light aromatic	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Xylene	Dermal	Rat	Not carcinogenic
Xylene	Ingestion	Multiple animal species	Not carcinogenic
Xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
Dimethyl siloxane, reaction product with silica	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic.
Distillates (petroleum), hydrotreated light	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Hexamethylene diisocyanate	Inhalation	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
2-Methoxy-1-methylethyl acetate	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
2-Methoxy-1-methylethyl acetate	Ingestion	Not toxic to male reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
2-Methoxy-1-methylethyl acetate	Ingestion	Not toxic to development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
2-Methoxy-1-methylethyl acetate	Inhalation	Not toxic to development	Rat	NOAEL 21.6 mg/l	during organogenesis
1,2,4-Trimethylbenzene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 1.5 mg/l	during gestation
Solvent naphtha (petroleum), light aromatic	Inhalation	Not toxic to female reproduction	Rat	NOAEL 1,500 ppm	2 generation
Solvent naphtha (petroleum), light aromatic	Inhalation	Not toxic to male reproduction	Rat	NOAEL 1,500 ppm	2 generation
Solvent naphtha (petroleum), light aromatic	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 500 ppm	2 generation
Xylene	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Xylene	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	during organogenesis
Xylene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	during gestation

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
Ethylbenzene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 4.3 mg/l	premating & during gestation
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Inhalation	Not toxic to female reproduction	Rat	NOAEL 0.004 mg/l	during gestation
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Inhalation	Not toxic to male reproduction	Rat	NOAEL 0.004 mg/l	4 weeks
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 0.001 mg/l	during gestation
Hexamethylene diisocyanate	Inhalation	Not toxic to female reproduction	Rat	NOAEL 0.002 mg/l	7 weeks
Hexamethylene diisocyanate	Inhalation	Not toxic to development	Rat	NOAEL 0.002 mg/l	7 weeks
Hexamethylene diisocyanate	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.014 mg/l	4 weeks

Lactation

Name	Route	Species	Value
Xylene	Ingestion	Mouse	Does not cause effects on or via lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Inhalation	respiratory irritation	May cause respiratory irritation		NOAEL Not available	
2-Methoxy-1-methylethyl acetate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
1,2,4-Trimethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
1,2,4-Trimethylbenzene	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
Solvent naphtha (petroleum), light aromatic	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Solvent naphtha (petroleum), light aromatic	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Professional judgement	NOAEL Not available	
Solvent naphtha (petroleum), light aromatic	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Xylene	Inhalation	auditory system	Causes damage to organs	Rat	LOAEL 6.3 mg/l	8 hours
Xylene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Xylene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Xylene	Inhalation	eyes	Some positive data exist, but the	Rat	NOAEL 3.5	not available

			data are not sufficient for classification		mg/l	
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 250 mg/kg	not applicable
Ethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Ethylbenzene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
Distillates (petroleum), hydrotreated light	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Distillates (petroleum), hydrotreated light	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Dermal	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 7,000 mg/kg	24 hours
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	Rat	NOAEL 0.00025 mg/l	4 weeks
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL Not available	not applicable
Hexamethylene diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	
Hexamethylene diisocyanate	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Barium Sulfate	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Titanium dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.010 mg/l	2 years
Titanium dioxide	Inhalation	pulmonary fibrosis	All data are negative	Human	NOAEL Not available	occupational exposure
2-Methoxy-1-methylethyl acetate	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 16.2 mg/l	9 days
2-Methoxy-1-methylethyl acetate	Inhalation	olfactory system	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 1.62 mg/l	9 days
2-Methoxy-1-methylethyl acetate	Inhalation	blood	All data are negative	Multiple animal species	NOAEL 16.2 mg/l	9 days
2-Methoxy-1-methylethyl acetate	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	44 days
Ethyl 3-ethoxypropionate	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 6 mg/l	90 days
Ethyl 3-ethoxypropionate	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 6 mg/l	17 days
Ethyl 3-ethoxypropionate	Inhalation	heart | liver |	All data are negative	Rat	NOAEL 6	17 days

		immune system | kidney and/or bladder			mg/l	
Ethyl 3-ethoxypropionate	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	17 days
Ethyl 3-ethoxypropionate	Ingestion	hematopoietic system	All data are negative	Rat	NOAEL 1,000 mg/kg/day	28 days
Ethyl 3-ethoxypropionate	Ingestion	kidney and/or bladder | respiratory system	All data are negative	Rat	NOAEL 1,000 mg/kg/day	17 days
1,2,4-Trimethylbenzene	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.5 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.1 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
1,2,4-Trimethylbenzene	Inhalation	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	heart | endocrine system | immune system	All data are negative	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-Trimethylbenzene	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 600 mg/kg/day	14 days
1,2,4-Trimethylbenzene	Ingestion	liver | immune system | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	28 days
Xylene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/l	4 weeks
Xylene	Inhalation	auditory system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 7.8 mg/l	5 days
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Inhalation	heart | endocrine system | hematopoietic system | muscles | kidney and/or bladder | respiratory system	All data are negative	Multiple animal species	NOAEL 3.5 mg/l	13 weeks
Xylene	Ingestion	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 900 mg/kg/day	2 weeks
Xylene	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,500 mg/kg/day	90 days
Xylene	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	heart | skin | endocrine system | bone, teeth, nails, and/or hair | hematopoietic system | immune system | nervous system | respiratory system	All data are negative	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Dimethyl siloxane, reaction product with silica	Inhalation	respiratory system | silicosis	All data are negative	Human	NOAEL Not available	occupational exposure
Ethylbenzene	Inhalation	kidney and/or	Some positive data exist, but the	Rat	NOAEL 1.1	2 years

		bladder	data are not sufficient for classification		mg/l	
Ethylbenzene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	103 weeks
Ethylbenzene	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.4 mg/l	28 days
Ethylbenzene	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.4 mg/l	5 days
Ethylbenzene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3.3 mg/l	103 weeks
Ethylbenzene	Inhalation	bone, teeth, nails, and/or hair | muscles	All data are negative	Multiple animal species	NOAEL 4.2 mg/l	90 days
Ethylbenzene	Inhalation	heart | immune system | respiratory system	All data are negative	Multiple animal species	NOAEL 3.3 mg/l	2 years
Ethylbenzene	Ingestion	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 680 mg/kg/day	6 months
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.00025 mg/l	4 weeks
Hexamethylene diisocyanate	Inhalation	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.002 mg/l	3 weeks
Hexamethylene diisocyanate	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.0014 mg/l	4 weeks
Hexamethylene diisocyanate	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.0012 mg/l	2 years
Hexamethylene diisocyanate	Inhalation	nervous system	All data are negative	Rat	NOAEL 0.002 mg/l	7 weeks
Hexamethylene diisocyanate	Inhalation	heart	All data are negative	Rat	NOAEL 0.001 mg/l	90 days

Aspiration Hazard

Name	Value
1,2,4-Trimethylbenzene	Aspiration hazard
Solvent naphtha (petroleum), light aromatic	Aspiration hazard
Xylene	Aspiration hazard
Ethylbenzene	Aspiration hazard
Distillates (petroleum), hydrotreated light	Aspiration hazard

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 agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result

1,2,4-Trimethylbenzene	95-63-6	Mysid Shrimp	Experimental	96 hours	EC50	2 mg/l
1,2,4-Trimethylbenzene	95-63-6	Water flea	Experimental	48 hours	EC50	3.6 mg/l
1,2,4-Trimethylbenzene	95-63-6	Fathead minnow	Experimental	96 hours	LC50	7.72 mg/l
2-Methoxy-1-methylethyl acetate	108-65-6	Fathead minnow	Experimental	96 hours	LC50	161 mg/l
2-Methoxy-1-methylethyl acetate	108-65-6	Water flea	Experimental	21 days	NOEC	>=100 mg/l
2-Methoxy-1-methylethyl acetate	108-65-6	Water flea	Experimental	48 hours	EC50	373 mg/l
7-Oxa-3,20-diazadispiro[5.1.11.2]heneicosane-20-propanoic acid, 2,2,4,4-tetramethyl-21-oxo-, dodecyl ester	85099-51-0		Data not available or insufficient for classification			
Barium Sulfate	7727-43-7	Fish other	Experimental	96 hours	LC50	>100 mg/l
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8		Data not available or insufficient for classification			
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate	76977-79-2		Data not available or insufficient for classification			
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	140921-24-0		Data not available or insufficient for classification			
Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-oxepanone	426822-87-9		Data not available or insufficient for classification			
Ethyl 3-	763-69-9	Green Algae	Experimental	72 hours	NOEC	114.86 mg/l

ethoxypropionate						
Ethyl 3-ethoxypropionate	763-69-9	Water flea	Experimental	48 hours	EC50	>479.7 mg/l
Ethyl 3-ethoxypropionate	763-69-9	Fathead minnow	Experimental	96 hours	LC50	45.3 mg/l
Ethylbenzene	100-41-4	Rainbow trout	Experimental	96 hours	LC50	4.2 mg/l
Ethylbenzene	100-41-4	Water flea	Experimental	24 hours	EC50	1.81 mg/l
Ethylbenzene	100-41-4	Green Algae	Experimental	96 hours	EC50	3.6 mg/l
Hexamethylene diisocyanate	822-06-0	Green Algae	Experimental	72 hours	NOEC	10 mg/l
Hexamethylene diisocyanate	822-06-0	Water flea	Experimental	21 days	NOEC	4.2 mg/l
Hexamethylene diisocyanate	822-06-0	Water flea	Experimental	48 hours	EC50	27 mg/l
Hexamethylene diisocyanate	822-06-0	Green algae	Experimental	72 hours	EC50	15 mg/l
Hexamethylene diisocyanate	822-06-0	Ricefish	Experimental	96 hours	LC50	71 mg/l
Distillates (petroleum), hydrotreated light	64742-47-8		Data not available or insufficient for classification			
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Water flea	Experimental	48 hours	LC50	17.4 mg/l
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Golden Orfe	Experimental	96 hours	LC50	110 mg/l
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Water flea	Experimental	21 days	NOEC	3 mg/l
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Green algae	Experimental	72 hours	NOEC	1.5 mg/l
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Green algae	Experimental	72 hours	EC50	37 mg/l

Solvent naphtha (petroleum), light aromatic	64742-95-6		Data not available or insufficient for classification			
2-octyl-2H-isothiazol-3-one	26530-20-1	Rainbow trout	Experimental	96 hours	LC50	0.047 mg/l
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	53880-05-0		Data not available or insufficient for classification			
Titanium dioxide	13463-67-7	Water flea	Experimental	30 days	NOEC	3 mg/l
Titanium dioxide	13463-67-7	Fish	Experimental	30 days	NOEC	>100 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Titanium dioxide	13463-67-7	Sheepshead Minnow	Experimental	96 hours	LC50	>240 mg/l
Xylene	1330-20-7		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Ethyl 3-ethoxypropionate	763-69-9	Experimental Photolysis		Photolytic half-life (in air)	1.2 days (t 1/2)	Other methods
1,2,4-Trimethylbenzene	95-63-6	Experimental Photolysis		Photolytic half-life (in air)	11.8 hours (t 1/2)	Other methods
Ethylbenzene	100-41-4	Experimental Photolysis		Photolytic half-life (in air)	4.26 days (t 1/2)	Other methods
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	53880-05-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-	426822-87-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

oxepanone						
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Distillates (petroleum), hydrotreated light	64742-47-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	140921-24-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Solvent naphtha (petroleum), light aromatic	64742-95-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Barium Sulfate	7727-43-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hexamethylene diisocyanate	822-06-0	Experimental Hydrolysis		Hydrolytic half-life	5 minutes (t 1/2)	Other methods
Xylene	1330-20-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
7-Oxa-3,20-diazadispiro[5.1.11.2]heneicosane-20-propanoic acid, 2,2,4,4-tetramethyl-21-oxo-, dodecyl ester	85099-51-0	Laboratory Biodegradation		BOD	<60 % weight	OECD 301F - Manometric respirometry
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate	76977-79-2	Estimated Biodegradation	28 days	BOD	1 % weight	OECD 301F - Manometric respirometry
Ethyl 3-ethoxypropionate	763-69-9	Experimental Biodegradation	18 days	% CO2 produced	100 % weight	OECD 301B - Modified sturm or CO2
1,2,4-Trimethylbenzene	95-63-6	Experimental Biodegradation	28 days	BOD	4 % weight	OECD 301C - MITI test (I)
2-Methoxy-1-methylethyl	108-65-6	Experimental Biodegradation	28 days	BOD	87.2 % weight	OECD 301C - MITI test (I)

acetate						
Hexamethylene diisocyanate	822-06-0	Experimental Biodegradation	14 days	BOD	55.5 % weight	OECD 301C - MITI test (I)
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)
2-octyl-2H-isothiazol-3-one	26530-20-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Ethylbenzene	100-41-4	Laboratory Biodegradation	14 days	BOD	81 % weight	Other methods

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
7-Oxa-3,20-diazadispiro[5.1.11.2]heneicosane-20-propanoic acid, 2,2,4,4-tetramethyl-21-oxo-, dodecyl ester	85099-51-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Solvent naphtha (petroleum), light aromatic	64742-95-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Barium Sulfate	7727-43-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	53880-05-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-oxepanone	426822-87-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
bis(2-	76977-79-2	Estimated		Bioaccumulati	246	Estimated:

ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate		Bioconcentration		on factor		Bioconcentration factor
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Distillates (petroleum), hydrotreated light	64742-47-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	140921-24-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Xylene	1330-20-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,2,4-Trimethylbenzene	95-63-6	Experimental BCF-Carp	56 days	Bioaccumulation factor	275	Other methods
Hexamethylene diisocyanate	822-06-0	Estimated Bioconcentration		Bioaccumulation factor	158	Estimated: Bioconcentration factor
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Experimental BCF-Carp	42 days	Bioaccumulation factor	<3.4	Other methods
2-octyl-2H-isothiazol-3-one	26530-20-1	Experimental BCF - Bluegill	67 days	Bioaccumulation factor	165	Other methods
Ethylbenzene	100-41-4	Experimental BCF - Other		Bioaccumulation factor	15	Other methods
Titanium dioxide	13463-67-7	Experimental BCF-Carp	42 days	Bioaccumulation factor	9.6	Other methods
Ethyl 3-ethoxypropionate	763-69-9	Experimental Bioconcentration		Log Kow	1.35	Other methods
2-Methoxy-1-methylethyl acetate	108-65-6	Experimental Bioconcentration		Log Kow	0.36	Other methods

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

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. 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.

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)
08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

SECTION 14: Transportation information

GR-2001-3395-1

ADR/RID: UN1263, PAINT RELATED MATERIAL, 3., III, (D/E), ADR Classification Code: F1.
IMDG-CODE: UN1263, PAINT RELATED MATERIAL, 3, III, IMDG-Code segregation code: NONE, EMS: FE,SE.
ICAO/IATA: UN1263, PAINT RELATED MATERIAL, 3., III.

SECTION 15: Regulatory information

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

Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Xylene	1330-20-7	Gr. 3: Not classifiable	International Agency for Research on Cancer

Global inventory status
Contact 3M for more information. 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

EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

List of relevant R-phrases

R10	Flammable.
R11	Highly flammable.
R20	Harmful by inhalation.
R21	Harmful in contact with skin.
R22	Harmful if swallowed.
R23	Toxic by inhalation.
R24	Toxic in contact with skin.
R34	Causes burns.
R36	Irritating to eyes.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R42	May cause sensitisation by inhalation.
R42/43	May cause sensitisation by inhalation and skin contact.
R43	May cause sensitisation by skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R50/53	Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R52	Harmful to aquatic organisms.
R65	Harmful: May cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

Revision information:

Revision Changes:
Safety phrase information was modified.
Section 8: Personal Protection - Skin/body information information was modified.
Section 1: Product identification numbers heading information was modified.
Section 16: List of relevant R phrase information information was modified.
Section 3: Composition/ Information of ingredients table information was modified.
Copyright information was modified.
Section 8: Occupational exposure limit table information was modified.
OEL Reg Agency Desc information was modified.

Telephone header information was modified.
Company Telephone information was modified.
Section 11: Aspiration Hazard Table 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 11: Health Effects - Inhalation information information was modified.
Section 5: Fire - Extinguishing media information information was modified.
Section 6: Accidental release clean-up information information was modified.
Section 7: Precautions safe handling information information was modified.
Section 7: Conditions safe storage information was modified.
Section 8: Personal Protection - Eye information information was modified.
Section 8: Personal Protection - Skin/hand information information was modified.
Section 8: Personal Protection - Respiratory Information information was modified.
Section 13: 13.1. Waste disposal note information was modified.
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.
Section 12: Component ecotoxicity information information was added.
Section 12: Persistence and Degradability information information was added.
Section 12:Bioccumulative potential information information was added.
Section 12: Component Ecotoxicity table Material column header information was added.
Section 12: Component Ecotoxicity table CAS No column header information was added.
Section 12: Component Ecotoxicity table Organism column header information was added.
Section 12: Component Ecotoxicity table Type column header information was added.
Section 12: Component Ecotoxicity table Exposure column header information was added.
Section 12: Component Ecotoxicity table End point column header information was added.
Section 12: Component Ecotoxicity table Result column header information was added.
Section 12: Persistence and degradability table Material column header information was added.
Section 12: Persistence and degradability table CAS No column header information was added.
Section 12: Persistence and degradability table Test Type column header information was added.
Section 12: Persistence and degradability table Duration column header information was added.
Section 12: Persistence and degradability table Test Result column header information was added.
Section 12: Persistence and degradability table Protocol column header information was added.
Section 12:Bioccumulative potential table Material column header information was added.
Section 12:Bioccumulative potential table CAS No column header information was added.
Section 12:Bioccumulative potential table CAS No column header information was added.
Section 12:Bioccumulative potential table Test Result column header information was added.
Section 12:Bioccumulative potential table Protocol column header information was added.
Section 12:Bioccumulative potential table Test Type column header information was added.
Label: Signal Word - Header information was added.
Label: Signal Word information was added.
Label: CLP Classification - Header information was added.
Label: CLP Classification information was added.
Label: CLP Classification information was added.
Label: CLP Classification - Header information was added.
Label: CLP Percent Unknown information was added.
Label: CLP Percent Unknown information was added.
Label: CLP Percent Unknown information was added.
Label: CLP Environmental Hazard Statements information was added.

Label: Graphic information was added.
Label: Graphic information was added.
Label: Symbol information was added.
Label: Symbol information was added.
Label: CLP Precautionary - Disposal information was added.
Label: CLP Precautionary - Disposal - Header information was added.
Label: CLP Precautionary - Prevention information was added.
Label: CLP Precautionary - Prevention - Header information was added.
Label: CLP Precautionary - Response information was added.
Label: CLP Precautionary - Response - Header information was added.
Label: Precautionary Statement - Header information was added.
CLP: Ingredient table information was added.
Section 2: Notes on labelling heading information was added.
Section 15: Label remarks and EU Detergent information was added.
Section 8: Occupational exposure limit table information was added.
Section 2: 2.2 & 2.3. CLP REGULATION heading information was added.
Label: CLP Ingredients table Ingredient heading information was added.
Label: CLP Ingredients table CAS No heading information was added.
Label: CLP Ingredients table Percent by Wt heading information was added.
Section 12: Persistence and degradability table Study Type column header information was added.
Section 12:Bioccumulative potential table Test Type column header information was added.
Section 2: H phrase reference information was added.
Legend description information was added.
BLV Reg Agency Desc information was added.
Section 10: Hazardous decomposition products during combustion text information was added.
Section 11: Disclosed components not in tables text information was added.
Section 12: Classification Warning information was added.
Section 11: Classification disclaimer information was added.
Section 8: 8.1.1 Biological limit values table heading information was added.
Section 8: BLV table information was added.
Section 8: BLV table ingredient column heading information was added.
Section 8: BLV table cas nbr column heading information was added.
Section 8: BLV table agency column heading information was added.
Section 8: BLV table cas nbr column heading information was added.
Section 8: BLV table biological specimen Column heading information was added.
Section 8: BLV table sampling time Column heading information was added.
Section 8: BLV table value Column heading information was added.
Section 8: BLV table additional comments Column heading information was added.
Section 8: glove data - Material heading information was added.
Section 8: glove data - Thickness heading information was added.
Section 8: glove data - Breakthrough Time heading information was added.
Section 8: glove data value information was added.
Section 8: Skin protection - recommended gloves information information was deleted.
Section 8: Eye/face protection text information was deleted.
Section 8: Respiratory protection - recommended respirators information was deleted.
Section 8: Skin protection - protective clothing text information was deleted.
Prints No Data if Component ecotoxicity information is not present information was deleted.
Prints No Data if Persistence and Degradability information is not present information was deleted.
Prints No Data if Bioccumulative potential information is not present information was deleted.
Label: CLP Supplemental Hazard Statements information was deleted.
Label: CLP Supplemental Hazard Statements - Header information was deleted.
Label: CLP Supplemental Information - Header information was deleted.
Section 8: mg/m³ key information was deleted.
Section 8: ppm key information was deleted.
Section 11: Classification disclaimer information was deleted.
Section 12: Classification Warning 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.

3M United Kingdom MSDSs are available at www.3M.com/uk