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 Poly-Tech EC 661

Product Identification Numbers
GR-2000-9996-2 GR-2001-0518-1

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 safety data sheet
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
Acute Toxicity, Category 4 - Acute Tox. 4; H332
Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334
Skin Sensitization, Category 1B - Skin Sens. 1B; H317
Reproductive Toxicity, Category 2 - Repr. 2; H361
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H 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
Polypropylene Glycol-Isophorone Diisocyanate copolymer	39323-37-0	10 - 20
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	53880-05-0	1 - 10
Phenol, isopropylated, phosphate (3:1)	68937-41-7	5 - 10
Xylene	1330-20-7	5 - 10
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8	5 - 10
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	140921-24-0	1 - 5
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	< 1
p-toluenesulphonyl isocyanate	4083-64-1	< 1
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate	76977-79-2	< 1
Hexamethylene diisocyanate	822-06-0	< 0.1
2-octyl-2H-isothiazol-3-one	26530-20-1	< 0.05

HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
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.
P261A	Avoid breathing vapours.
P284A	In case of inadequate ventilation wear respiratory protection.
P280E	Wear protective gloves.

Response:

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Disposal:

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

19% of the mixture consists of components of unknown acute oral toxicity.
42% of the mixture consists of components of unknown acute dermal toxicity.

27% of the mixture consists of components of unknown acute inhalation toxicity.
Contains 29% of components with unknown hazards to the aquatic environment.

EU VOC Directive (2004/42/EC) labelling: 2004/42/EC IIA(iSB)(500)
193 g/l

Notes on labelling

Nota N applied to CAS 64742-46-7.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Dolomite	16389-88-1	EINECS 240-440-2	30 - 40	
Polypropylene Glycol-Isophorone Diisocyanate copolymer	39323-37-0		10 - 20	Skin Sens. 1, H317 (Vendor)
Phenol, isopropylated, phosphate (3:1)	68937-41-7	EINECS 273-066-3	5 - 10	Repr. 2, H361df (Vendor)
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8	EINECS 247-735-5	5 - 10	Acute Tox. 3, H331; Resp. Sens. 1, H334; Skin Sens. 1B, H317; STOT SE 3, H335 (Self Classified)
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	53880-05-0	NLP 500-125-5	1 - 10	Skin Sens. 1, H317; STOT SE 3, H335 (Self Classified)
Xylene	1330-20-7	EINECS 215-535-7	5 - 10	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315 - Nota C (CLP)
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	140921-24-0	EINECS 411-700-4	1 - 5	Skin Sens. 1, H317 (CLP)
Triphenyl Phosphate	115-86-6	EINECS 204-112-2	1 - 5	Aquatic Acute 1, H400,M=1; Aquatic Chronic 2, H411 (Self Classified)
Propyl acetate	109-60-4	EINECS 203-686-1	1 - 5	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336; EUH066 - Nota C (CLP)
Ethylbenzene	100-41-4	EINECS 202-849-4	1 - 5	Flam. Liq. 2, H225; Acute Tox. 4, H332; Asp. Tox. 1, H304; STOT RE 2, H373 (CLP)
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate	76977-79-2	EINECS 278-583-8	< 1	Skin Sens. 1, H317 (Vendor)
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	EINECS 223-861-6	< 1	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)
p-toluenesulphonyl isocyanate	4083-64-1	EINECS 223-810-8	< 1	EUH014; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; STOT SE 3, H335 (CLP)

				Aquatic Chronic 3, H412 (Self Classified)
Distillates (petroleum), hydrotreated middle	64742-46-7	EINECS 265-148-2	0.1 - 1	Nota N (CLP) Acute Tox. 4, H332; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066 (Self Classified)
Terbutryn	886-50-0	EINECS 212-950-5	< 0.1	Aquatic Acute 1, H400,M=100; Aquatic Chronic 1, H410,M=100 (Self Classified)
Hexamethylene diisocyanate	822-06-0	EINECS 212-485-8	< 0.1	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	< 0.05	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)
2-Methoxy-1-methylethyl acetate	108-65-6	EINECS 203-603-9	< 2	Flam. Liq. 3, H226 (CLP)
Quartz	14808-60-7	EINECS 238-878-4	< 1	STOT RE 1, H372 (Self Classified)
Carbon Black (nano)	1333-86-4	EINECS 215-609-9	< 1	

Please see section 16 for the full text of any H statements referred to in this section
Please refer to section 15 for 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
Do not induce vomiting. Get immediate 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. 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 vapors 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. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. 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 container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Clean up residue with an appropriate solvent selected by a qualified and 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 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 vapour accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep cool. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from heat. Store away from acids. Store away from 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
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
Propyl acetate	109-60-4	UK HSC	TWA:849 mg/m3(200 ppm);STEL:1060 mg/m3(250 ppm)	
Triphenyl Phosphate	115-86-6	UK HSC	TWA:3 mg/m3;STEL:6 mg/m3	
Xylene	1330-20-7	UK HSC	TWA:220 mg/m3(50 ppm);STEL:441 mg/m3(100 ppm)	Skin Notation
Carbon Black (nano)	1333-86-4	UK HSC	TWA: 3.5 mg/m³; STEL: 7 mg/m³	
Quartz	14808-60-7	UK HSC	TWA(respirable):0.1 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
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

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:
Safety glasses with side shields.

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

Material	**Thickness (mm)**	**Breakthrough Time**
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.
Specific Physical Form:	Thixotropic liquid.
Appearance/Odour	Aromatic odour; Black colour
Odour threshold	*No data available.*
pH	*No data available.*
Boiling point/boiling range	>= 140 ºC
Melting point	*Not applicable.*
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified

Oxidising properties	Not classified
Flash point	>= 30 ºC [*Test Method:*Closed Cup]
Autoignition temperature	>= 315 ºC
Flammable Limits(LEL)	> 1 %
Flammable Limits(UEL)	< 12.6 %
Vapour pressure	1,039.9 Pa [@ 25 ºC] [*Test Method:*Estimated]
Relative density	1.365 [*Ref Std:*WATER=1]
Water solubility	*No data available.*
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	1.365 g/ml

9.2. Other information

Volatile organic compounds (VOC)	193 g/l [*Test Method:*Estimated] [*Details:*EU Definition]
Percent volatile	14.15 % 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
Temperatures above the boiling point.
Sparks and/or flames.
Heat.

10.5 Incompatible materials
Alcohols.
Combustibles.
Strong acids.
Strong oxidising agents.
Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

10.6 Hazardous decomposition products

Substance	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 additional health effects (see below).

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

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

Ingestion
May be harmful if swallowed.
Chemical (aspiration) pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish coloured skin (cyanosis), and may be fatal. Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

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

Prolonged or repeated exposure may cause target organ effects:
Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.
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.

Reproductive/Developmental Toxicity:
Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

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 ATE2,000 - 5,000 mg/kg
Dolomite	Ingestion	Rat	LD50 > 2,000 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
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
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.521 mg/l
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Ingestion	Rat	LD50 > 2,500 mg/kg
Triphenyl Phosphate	Dermal	Rabbit	LD50 > 7,900 mg/kg
Triphenyl Phosphate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 50 mg/l
Triphenyl Phosphate	Ingestion	Rat	LD50 > 3,000 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
Propyl acetate	Dermal	Rabbit	LD50 > 17,760 mg/kg
Propyl acetate	Inhalation-Vapor (4 hours)	Rat	LC50 < 3.4 mg/l
Propyl acetate	Ingestion	Rat	LD50 > 8,700 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
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
Distillates (petroleum), hydrotreated middle	Dermal	Rabbit	LD50 > 2,000 mg/kg
Distillates (petroleum), hydrotreated middle	Inhalation-Dust/Mist (4 hours)	Rat	LC50 4.6 mg/l
Distillates (petroleum), hydrotreated middle	Ingestion	Rat	LD50 > 5,000 mg/kg
Carbon Black (nano)	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon Black (nano)	Ingestion	Rat	LD50 > 8,000 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
Quartz	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz	Ingestion		LD50 estimated to be > 5,000 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
Xylene	Rabbit	Mild irritant
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Rabbit	No significant irritation
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Mild irritant
2-Methoxy-1-methylethyl acetate	Rabbit	No significant irritation
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate	Professional judgement	Mild irritant
Distillates (petroleum), hydrotreated middle	Rabbit	Minimal irritation
Carbon Black (nano)	Rabbit	No significant irritation
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Rabbit	Corrosive
Quartz	Professional judgement	No significant irritation
Hexamethylene diisocyanate	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Xylene	Rabbit	Mild irritant
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Rabbit	Mild irritant
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Rabbit	No significant irritation
Ethylbenzene	Rabbit	Moderate irritant
2-Methoxy-1-methylethyl acetate	Rabbit	Mild irritant
Distillates (petroleum), hydrotreated middle	Not available	Mild irritant
Carbon Black (nano)	Rabbit	No significant irritation
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Rabbit	Corrosive
Hexamethylene diisocyanate	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Guinea pig	Sensitising
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Mouse	Sensitising
Ethylbenzene	Human	Not sensitising
2-Methoxy-1-methylethyl acetate	Guinea pig	Not sensitising
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
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	In Vitro	Not mutagenic
2-ethylhexyl (6-isocyanatohexyl)-carbamate	In Vitro	Not mutagenic

Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
2-Methoxy-1-methylethyl acetate	In Vitro	Not mutagenic
Distillates (petroleum), hydrotreated middle	In Vitro	Some positive data exist, but the data are not sufficient for classification
Carbon Black (nano)	In Vitro	Not mutagenic
Carbon Black (nano)	In vivo	Some positive data exist, but the data are not sufficient for classification
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
Quartz	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz	In vivo	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
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
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic.
Distillates (petroleum), hydrotreated middle	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Carbon Black (nano)	Dermal	Mouse	Not carcinogenic
Carbon Black (nano)	Ingestion	Mouse	Not carcinogenic
Carbon Black (nano)	Inhalation	Rat	Carcinogenic.
Quartz	Inhalation	Human and animal	Carcinogenic.
Hexamethylene diisocyanate	Inhalation	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
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
Ethylbenzene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 4.3 mg/l	premating & during gestation
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	premating &

				1,000 mg/kg/day	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
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
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 data are not sufficient for classification	Rat	NOAEL 3.5 mg/l	not available
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
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	Inhalation	respiratory irritation	May cause respiratory irritation		NOAEL Not available	
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Inhalation	respiratory irritation	May cause respiratory irritation	Professional judgement	NOAEL Not available	
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	
2-Methoxy-1-methylethyl acetate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Distillates (petroleum),	Inhalation	central nervous	Some positive data exist, but the	Not	NOAEL NA	

hydrotreated middle		system depression | respiratory irritation	data are not sufficient for classification	available		
Distillates (petroleum), hydrotreated middle	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Not available	NOAEL NA	
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
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
Ethylbenzene	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	2 years
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
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
Carbon Black (nano)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
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
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
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
Xylene	Aspiration hazard
Ethylbenzene	Aspiration hazard
Distillates (petroleum), hydrotreated middle	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
Terbutryn	886-50-0	Green algae	Experimental	72 hours	EC50	0.003 mg/l
Terbutryn	886-50-0	Rainbow trout	Experimental	96 hours	LC50	0.82 mg/l
Terbutryn	886-50-0	Water flea	Experimental	48 hours	EC50	7.1 mg/l
2-Methoxy-1-methylethyl acetate	108-65-6	Water flea	Experimental	48 hours	EC50	373 mg/l
2-Methoxy-1-methylethyl acetate	108-65-6	Fathead minnow	Experimental	96 hours	LC50	161 mg/l
Dolomite	16389-88-1	Western Mosquitofish	Experimental	24 hours	LC50	56,000 mg/l
Ethylbenzene	100-41-4	Green Algae	Experimental	96 hours	EC50	3.6 mg/l
Ethylbenzene	100-41-4	Water flea	Experimental	24 hours	EC50	1.81 mg/l
Ethylbenzene	100-41-4	Rainbow trout	Experimental	96 hours	LC50	4.2 mg/l
Hexamethylene diisocyanate	822-06-0	Green algae	Experimental	72 hours	EC50	15 mg/l
Hexamethylene diisocyanate	822-06-0	Water flea	Experimental	48 hours	EC50	27 mg/l
Hexamethylene diisocyanate	822-06-0	Ricefish	Experimental	96 hours	LC50	71 mg/l
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Green algae	Estimated	72 hours	EC50	>50 mg/l
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Water flea	Estimated	48 hours	EC50	17.4 mg/l
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Golden Orfe	Estimated	96 hours	LC50	110 mg/l
Propyl acetate	109-60-4	Fathead minnow	Experimental	96 hours	LC50	56 mg/l
Propyl acetate	109-60-4	Water flea	Experimental	24 hours	EC50	318 mg/l
2-octyl-2H-isothiazol-3-one	26530-20-1	Rainbow trout	Experimental	96 hours	LC50	0.047 mg/l
Phenol, isopropylated, phosphate (3:1)	68937-41-7	Fathead minnow	Estimated	96 hours	LC50	3.08 mg/l
p-toluenesulphonyl isocyanate	4083-64-1	Ricefish	Experimental	96 hours	LC50	435 mg/l
p-	4083-64-1	Water flea	Experimental	24 hours	EC50	150 mg/l

toluenesulphonyl isocyanate						
p-toluenesulphonyl isocyanate	4083-64-1	Green Algae	Experimental	72 hours	EC50	23 mg/l
Triphenyl Phosphate	115-86-6	Rainbow trout	Experimental	96 hours	LC50	0.85 mg/l
Triphenyl Phosphate	115-86-6	Water flea	Experimental	48 hours	EC50	1 mg/l
Triphenyl Phosphate	115-86-6	Green algae	Experimental	72 hours	EC50	4 mg/l
2-Methoxy-1-methylethyl acetate	108-65-6	Water flea	Experimental	21 days	NOEC	>=100 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
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Green algae	Estimated	72 hours	Effect Concentration 10%	11.2 mg/l
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Water flea	Estimated	21 days	NOEC	3 mg/l
p-toluenesulphonyl isocyanate	4083-64-1	Water flea	Experimental	21 days	NOEC	47 mg/l
Triphenyl Phosphate	115-86-6	Water flea	Experimental	21 days	NOEC	0.25 mg/l
Triphenyl Phosphate	115-86-6	Green algae	Experimental	72 hours	NOEC	0.98 mg/l
Triphenyl Phosphate	115-86-6	Fathead minnow	Experimental	90 days	NOEC	0.087 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			
Carbon Black	1333-86-4		Data not			

(nano)			available or insufficient for classification			
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	53880-05-0		Data not available or insufficient for classification			
Polypropylene Glycol-Isophorone Diisocyanate copolymer	39323-37-0		Data not available or insufficient for classification			
Quartz	14808-60-7		Data not available or insufficient for classification			
Distillates (petroleum), hydrotreated middle	64742-46-7		Data not available or insufficient for classification			
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
Ethylbenzene	100-41-4	Experimental Photolysis		Photolytic half-life (in air)	4.26 days (t 1/2)	Other methods
Distillates (petroleum), hydrotreated middle	64742-46-7	Estimated Photolysis		Photolytic half-life (in air)	2.45 days (t 1/2)	Other methods
Polypropylene Glycol-Isophorone Diisocyanate copolymer	39323-37-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Triphenyl Phosphate	115-86-6	Experimental Hydrolysis		Hydrolytic half-life	19 days (t 1/2)	Other methods
Hexamethylene diisocyanate	822-06-0	Experimental Hydrolysis		Hydrolytic half-life	5 minutes (t 1/2)	Other methods
2-octyl-2H-isothiazol-3-one	26530-20-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
p-toluenesulphonyl isocyanate	4083-64-1	Estimated Hydrolysis		Hydrolytic half-life	<10 minutes (t 1/2)	Other methods
Carbon Black (nano)	1333-86-4	Data not available or	N/A	N/A	N/A	N/A

		insufficient for classification				
Dolomite	16389-88-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Phenol, isopropylated, phosphate (3:1)	68937-41-7	Experimental Biodegradation	26 days	Dissolv. Organic Carbon Deplet	94.3 % weight	OECD 301A - DOC Die Away Test
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate	76977-79-2	Estimated Biodegradation	28 days	BOD	1 % weight	OECD 301F - Manometric respirometry
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
2-Methoxy-1-methylethyl acetate	108-65-6	Experimental Biodegradation	28 days	BOD	87.2 % weight	OECD 301C - MITI test (I)
Terbutryn	886-50-0	Estimated Biodegradation	28 days	CO2 evolution	0 % weight	OECD 301B - Modified sturm or CO2
Triphenyl Phosphate	115-86-6	Experimental Biodegradation	28 days	BOD	90 % weight	OECD 301C - MITI test (I)
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	Estimated Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hexamethylene diisocyanate	822-06-0	Experimental Biodegradation	14 days	BOD	55.5 % weight	OECD 301C - MITI test (I)
Propyl acetate	109-60-4	Experimental Biodegradation	14 days	BOD	81 % weight	OECD 301C - MITI test (I)
Ethylbenzene	100-41-4	Laboratory Biodegradation	14 days	BOD	81 % weight	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
p-	4083-64-1	Experimental	28 days	BOD	3 % weight	OECD 301C - MITI

toluenesulphonyl isocyanate		Biodegradation				test (I)
Xylene	1330-20-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Dolomite	16389-88-1	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
Polypropylene Glycol-Isophorone Diisocyanate copolymer	39323-37-0	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
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8	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
Carbon Black (nano)	1333-86-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Phenol, isopropylated, phosphate (3:1)	68937-41-7	Estimated Bioconcentration		Bioaccumulation factor	13.4	Estimated: Bioconcentration factor
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbama	76977-79-2	Estimated Bioconcentration		Bioaccumulation factor	246	Estimated: Bioconcentration factor

te						
Terbutryn	886-50-0	Estimated Bioconcentration		Bioaccumulation factor	174	Estimated: Bioconcentration factor
Triphenyl Phosphate	115-86-6	Experimental BCF - Rainbow Tr	90 days	Bioaccumulation factor	271	Other methods
Hexamethylene diisocyanate	822-06-0	Estimated Bioconcentration		Bioaccumulation factor	158	Estimated: Bioconcentration factor
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
2-Methoxy-1-methylethyl acetate	108-65-6	Experimental Bioconcentration		Log Kow	0.36	Other methods
Propyl acetate	109-60-4	Experimental Bioconcentration		Log Kow	1.24	Other methods
p-toluenesulphonyl isocyanate	4083-64-1	Experimental Bioconcentration		Log Kow	0.82	Other methods
Distillates (petroleum), hydrotreated middle	64742-46-7	Estimated Bioconcentration		Log Kow	4.61	Estimated: Octanol-water partition coefficient

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-2000-9996-2

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.

GR-2001-0518-1

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
Carbon Black (nano)	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Quartz	14808-60-7	Grp. 1: Carcinogenic to humans	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 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 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

EUH014	Reacts violently with water.
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.
H361df	Suspected of damaging fertility. Suspected of damaging the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
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.
H412	Harmful to aquatic life with long lasting effects.

Revision information:
Revision Changes:
Section 8: Eye/face protection information information was modified.
Section 8: Respiratory protection - recommended respirators information information was modified.
Section 3: Composition/ Information of ingredients table information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Label: CLP Classification information was modified.
Label: CLP Classification information was modified.
Label: CLP Percent Unknown information was modified.
Label: CLP Percent Unknown information was modified.
Label: CLP Percent Unknown information was modified.
Label: Graphic information was modified.
Label: Symbol information was modified.
Label: CLP Precautionary - Prevention information was modified.
Label: CLP Precautionary - Response information was modified.
CLP: Ingredient table information was modified.
Section 3: Reference to section 15 for Nota info information was modified.
Section 11: Acute Toxicity table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Health Effects - Eye information information was modified.
Section 11: Health Effects - Skin information information was modified.
Section 11: Health Effects - Inhalation information information was modified.
Section 11: Health Effects - Ingestion information information was modified.
Section 6: Accidental release personal 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 4: First aid for ingestion (swallowing) information information was modified.
Section 8: glove data value information was modified.
Section 2: EU VOC Directive (2004/42/EC) heading information was added.
Section 02: EU VOC Directive (2004/42/EC) labelling information was added.
Section 02: EU VOC Directive (2004/42/EC) labelling information was added.
Section 03: Reference to H statement explanation in Section 016 information was added.
Risk phrase information was deleted.

Safety phrase information was deleted.
Section 2: Contains heading information was deleted.
Section 2: Safety phrases heading information was deleted.
Section 16: List of relevant R-phrases information was deleted.
Section 2: Label ingredient information information was deleted.
Section 2: Indication of danger heading information was deleted.
Section 16: List of relevant R phrase information information was deleted.
Section 2: Risk phrases heading information was deleted.
Section 2: Indication of danger information information was deleted.
Section 2: Notes on labelling heading information was deleted.
Section 2: Special provisions concerning the labelling of certain substances heading information was deleted.
Section 2: Label remarks information was deleted.
Section 2: Additional label requirements phrase information was deleted.
Section 3: Reference to R and H statement explanation in Section 16 information was deleted.
Section 2: 2.2 & 2.3. DSD/DPD heading information was deleted.
Label: Graphic Text information was deleted.
Section 2: R phrase reference information was deleted.
Label: Graphic information was deleted.
Label: Graphic information was deleted.
Label: Graphic Text information was deleted.
Section 8: glove data value information was deleted.

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