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 Roof Detailing Compound SDR 655 (For Dark Grey) (Part A)

Product Identification Numbers
GR-2001-4027-9

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

Identified uses
Roof joint coating.

1.3. Details of the supplier of the substance or mixture

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

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

1.4. Emergency telephone number
+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:
Flammable Liquid, Category 3 - Flam. Liq. 3; H226
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.

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

Indication of danger
Flammable; R10
Toxic for reproduction; Repr. Cat. 3 R62-63
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) |GHS08 (Health Hazard) |GHS09 (Environment) |

Pictograms

Ingredient	CAS Nbr	% by Wt
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	140921-24-0	15 - 25
Phenol, isopropylated, phosphate (3:1)	68937-41-7	5 - 15
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8	5 - 10
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate	76977-79-2	< 1
2-octyl-2H-isothiazol-3-one	26530-20-1	< 0.1
Hexamethylene diisocyanate	822-06-0	< 0.1

HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
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.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
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.
P370 + P378G	In case of fire: Use a fire fighting agent suitable for flammable liquids and solids such as dry chemical or carbon dioxide to extinguish.

Disposal:

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

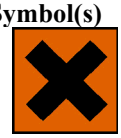
13% of the mixture consists of components of unknown acute oral toxicity.
33% of the mixture consists of components of unknown acute dermal toxicity.
25% of the mixture consists of components of unknown acute inhalation toxicity.
Contains 38% of components with unknown hazards to the aquatic environment.

Notes on labelling

Nota N applied to CAS# 64742-46-7.

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; 2-octyl-2H-isothiazol-3-one; Phenol, isopropylated, phosphate (3:1)

Risk phrases

R10	Flammable.
R42/43	May cause sensitisation by inhalation and skin contact.
R62	Possible risk of impaired fertility.
R63	Possible risk of harm to the unborn child.
R51/53	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Safety phrases

S23A	Do not breathe vapour.
S36/37	Wear suitable protective clothing and gloves.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
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 N applied to CAS# 64742-46-7.

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
Aluminium hydroxide	21645-51-2	EINECS 244-492-7	20 - 30	
1,6-Hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	140921-24-0	EINECS 411-700-4	15 - 25	R43 (EU) Skin Sens. 1, H317 (CLP)
Phenol, isopropylated, phosphate (3:1)	68937-41-7	EINECS 273-066-3	5 - 15	Repr.Cat.3:R62; Repr.Cat.3:R63 (Vendor) R52 (Self Classified) Repr. 2, H361df (Vendor)
Barium Sulfate	7727-43-7	EINECS 231-784-4	5 - 15	
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8	EINECS 247-735-5	5 - 10	Xi:R38; R42-43 (Vendor) Resp. Sens. 1, H334; Skin Sens. 1B, H317 (Vendor)
Triphenyl Phosphate	115-86-6	EINECS 204-112-2	1 - 10	N:R50/53 (Self Classified) Aquatic Acute 1, H400,M=1; Aquatic Chronic 2, H411 (Self Classified)
Xylene	1330-20-7	EINECS 215-535-7	5 - 10	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)
Non-Hazardous Ingredients	Mixture		3 - 7	
Ethylbenzene	100-41-4	EINECS 202-849-4	1 - 5	F:R11; Xn:R20 (EU) R52 (Self Classified) Flam. Liq. 2, H225; Acute Tox. 4, H332 (CLP)
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)
terbutryn	886-50-0	EINECS 212-950-5	< 1	N:R50/53 (Self Classified) Aquatic Acute 1, H400,M=100; Aquatic Chronic 1, H410,M=100 (Self Classified)
2,2,4-Trimethylpentane	540-84-1	EINECS 208-759-1	< 1	F:R11; Xn:R65; Xi:R38; N:R50/53; R67 - Nota 4,C (EU) Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=1 - Nota C (CLP)
Titanium dioxide	13463-67-7	EINECS 236-675-5	< 1	
Distillates (petroleum), hydrotreated middle	64742-46-7	EINECS 265-148-2	< 1	Nota N (EU) Xn:R20-65; R66 (Self

				Classified) Nota N (CLP) Acute Tox. 4, H332; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066 (Self Classified)
2-octyl-2H-isothiazol-3-one	26530-20-1	EINECS 247-761-7	< 0.1	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=100; Aquatic Chronic 1, H410,M=100 (CLP)
Hexamethylene diisocyanate	822-06-0	EINECS 212-485-8	< 0.1	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)

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 and solids 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.

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 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. 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 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. Ground/bond container and receiving equipment. 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.

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep cool. Keep container tightly closed. 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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Ethylbenzene	100-41-4	Health and Safety Comm. (UK)	TWA:441 mg/m3(100 ppm);STEL:552 mg/m3(125 ppm)	Skin Notation
Triphenyl Phosphate	115-86-6	Health and Safety Comm. (UK)	TWA:3 mg/m3;STEL:6 mg/m3	
Xylene	1330-20-7	Health and Safety Comm. (UK)	TWA:220 mg/m3(50 ppm);STEL:441 mg/m3(100 ppm)	Skin Notation
Titanium dioxide	13463-67-7	Health and Safety Comm. (UK)	TWA(Inhalable):10 mg/m3;TWA(respirable):4 mg/m³	
Barium Sulfate	7727-43-7	Health and Safety Comm. (UK)	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	Health and Safety Comm. (UK)	TWA(as NCO):0.02 mg/m3;STEL(as NCO):0.07 mg/m3	Respiratory Sensitizer

Health and Safety Comm. (UK) : 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.
Gloves made from the following material(s) are recommended: Polymer laminate

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:	Viscous.
Appearance/Odour	White colour; aromatic odour
Odour threshold	*No data available.*
pH	*No data available.*
Boiling point/boiling range	137 ºC
Melting point	*No data available.*
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	23 ºC [*Test Method:*Closed Cup]
Autoignition temperature	315 ºC
Flammable Limits(LEL)	1 % volume
Flammable Limits(UEL)	7 % volume
Vapour pressure	4,999.6 Pa [@ 38 ºC]
Relative density	1.42 g/cm3 [*Ref Std:*WATER=1]
Water solubility	Negligible
Solubility- non-water	Nil
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	1.42 g/ml

9.2. Other information

Volatile organic compounds (VOC)	100 g/l [*Test Method:*Estimated] [*Details:*EU Directive 2004/42/EC annex IIA (j) <500 g/l (from 1.1.2010)]

Percent volatile	9.873 % 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
Heat.
Sparks and/or flames.
Temperatures above the boiling point.

10.5 Incompatible materials
Alcohols.
Combustibles.
Strong acids.
Strong oxidising agents.

Moisture.

10.6 Hazardous decomposition products

Substance	Condition
Carbon monoxide.	Not specified.
Carbon dioxide.	Not specified.

SECTION 11: Toxicological information

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

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation
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
Vapours released during curing may cause 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:
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-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Aluminium hydroxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminium hydroxide	Ingestion	Rat	LD50 > 5,000 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
Barium Sulfate	Ingestion	Rat	LD50 > 15,000 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
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
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
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
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
2,2,4-Trimethylpentane	Dermal	Rabbit	LD50 > 2,000 mg/kg
2,2,4-Trimethylpentane	Inhalation-Vapor (4 hours)	Rat	LC50 > 33.5 mg/l
2,2,4-Trimethylpentane	Ingestion	Rat	LD50 > 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
Aluminium hydroxide	Rabbit	No significant irritation
Xylene	Rabbit	Mild irritant
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Mild irritant
Titanium dioxide	Rabbit	No significant irritation
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate		Mild irritant
Distillates (petroleum), hydrotreated middle	Rabbit	Minimal irritation
2,2,4-Trimethylpentane	Human and animal	Minimal irritation
Hexamethylene diisocyanate	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Aluminium hydroxide	Rabbit	No significant irritation
Barium Sulfate	Rabbit	No significant irritation
Xylene	Rabbit	Mild irritant
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Rabbit	No significant irritation
Ethylbenzene	Rabbit	Moderate irritant
Titanium dioxide	Rabbit	No significant irritation
Distillates (petroleum), hydrotreated middle	Not available	Mild irritant
2,2,4-Trimethylpentane	Rabbit	Mild irritant
Hexamethylene diisocyanate	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
Aluminium hydroxide	Guinea pig	Not sensitizing
2-ethylhexyl (6-isocyanatohexyl)-carbamate	Mouse	Sensitising
Ethylbenzene	Human	Not sensitizing
Titanium dioxide	Human and animal	Not sensitizing
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate		Sensitising
2,2,4-Trimethylpentane	Human	Not sensitizing

Hexamethylene diisocyanate	Multiple animal species	Sensitising

Respiratory Sensitisation

Name	Species	Value
2-ethylhexyl (6-isocyanatohexyl)-carbamate		Sensitising
Hexamethylene diisocyanate	Human and animal	Sensitising

Germ Cell Mutagenicity

Name	Route	Value
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	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
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
Distillates (petroleum), hydrotreated middle	In Vitro	Some positive data exist, but the data are not sufficient for classification
2,2,4-Trimethylpentane	In vivo	Not mutagenic
2,2,4-Trimethylpentane	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
Aluminium hydroxide	Not specified.	Multiple animal species	Not carcinogenic
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.
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.
Distillates (petroleum), hydrotreated middle	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
Aluminium hydroxide	Ingestion	Not toxic to development	Rat	NOAEL 768 mg/kg/day	during organogenesis
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	Human	NOAEL Not	occupational

		exist, but the data are not sufficient for classification		available	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
2,2,4-Trimethylpentane	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5.6 mg/l	during organogenesis
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
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 middle	Inhalation	central nervous system depression | respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL NA	
Distillates (petroleum), hydrotreated middle	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Not available	NOAEL NA	
2,2,4-Trimethylpentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
2,2,4-Trimethylpentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

2,2,4-Trimethylpentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL 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
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	All data are negative	Multiple	NOAEL 3.3	2 years

		system | respiratory system		animal species	mg/l	
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
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
2,2,4-Trimethylpentane	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 5.6 mg/l	12 weeks
2,2,4-Trimethylpentane	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.2 mg/l	1 years
2,2,4-Trimethylpentane	Ingestion	liver	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 350 mg/kg/day	3 days
2,2,4-Trimethylpentane	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	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
Xylene	Aspiration hazard
Ethylbenzene	Aspiration hazard
Distillates (petroleum), hydrotreated middle	Aspiration hazard
2,2,4-Trimethylpentane	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 be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
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
terbutryn	886-50-0	Green algae	Experimental	72 hours	EC50	0.003 mg/l

2,2,4-Trimethylpentane	540-84-1	Ricefish	Experimental	96 hours	LC50	0.561 mg/l
Aluminium hydroxide	21645-51-2	Fish	Laboratory	96 hours	LC50	>100 mg/l
Aluminium hydroxide	21645-51-2	Water flea	Laboratory	48 hours	EC50	>100 mg/l
Aluminium hydroxide	21645-51-2	Green algae	Laboratory	72 hours	EC50	>100 mg/l
Barium Sulfate	7727-43-7	Fish other	Experimental	96 hours	LC50	>100 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
Ethylbenzene	100-41-4	Green Algae	Experimental	96 hours	EC50	3.6 mg/l
Hexamethylene diisocyanate	822-06-0	Ricefish	Experimental	96 hours	LC50	71 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
2-octyl-2H-isothiazol-3-one	26530-20-1	Rainbow trout	Experimental	96 hours	LC50	0.047 mg/l
2-octyl-2H-isothiazol-3-one	26530-20-1	Crustacea	Experimental	24 hours	EC50	0.002 mg/l
Phenol, isopropylated, phosphate (3:1)	68937-41-7	Fathead minnow	Estimated	96 hours	LC50	3.08 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
Titanium dioxide	13463-67-7	Crustacea other	Experimental	96 hours	EC50	>300 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
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
Titanium dioxide	13463-67-7	Fish	Experimental	30 days	NOEC	>=1,000 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	30 days	NOEC	3 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			
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
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
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
2-ethylhexyl (6-isocyanatohexyl)-carbamate	26488-60-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
bis(2-ethylhexyl) 1,6-hexan-1,6-diylbiscarbamate	76977-79-2	Estimated Biodegradation	28 days	BOD	1 % weight	OECD 301F - Manometric respirometry
terbutryn	886-50-0	Estimated Biodegradation	28 days	CO2 evolution	0 % weight	OECD 301B - Modified sturm or CO2
2-octyl-2H-isothiazol-3-one	26530-20-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,2,4-Trimethylpentane	540-84-1	Experimental Photolysis		Photolytic half-life (in air)	8.36 days (t 1/2)	Other methods
2,2,4-	540-84-1	Experimental	28 days	BOD	0 % weight	OECD 301C - MITI

Trimethylpentane		Biodegradation				test (I)
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
Hexamethylene diisocyanate	822-06-0	Experimental Biodegradation	14 days	BOD	55.5 % weight	OECD 301C - MITI test (I)
Titanium dioxide	13463-67-7	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
Triphenyl Phosphate	115-86-6	Experimental Biodegradation	28 days	BOD	90 % weight	OECD 301C - MITI test (I)
Ethylbenzene	100-41-4	Experimental Photolysis		Photolytic half-life (in air)	4.26 days (t 1/2)	Other methods
Ethylbenzene	100-41-4	Laboratory Biodegradation	14 days	BOD	81 % weight	Other methods
Xylene	1330-20-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Distillates (petroleum), hydrotreated middle	64742-46-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Aluminium hydroxide	21645-51-2	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
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
Phenol, isopropylated, phosphate (3:1)	68937-41-7	Estimated Bioconcentration		Bioaccumulation factor	13.4	Estimated: 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
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
2-octyl-2H-isothiazol-3-one	26530-20-1	Experimental BCF - Bluegill	67 days	Bioaccumulation factor	165	Other methods
2,2,4-Trimethylpentane	540-84-1	Experimental BCF-Carp	28 days	Bioaccumulation factor	540	Other methods
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	Estimated Bioconcentration		Bioaccumulation factor	158	Estimated: Bioconcentration factor
Titanium dioxide	13463-67-7	Experimental BCF - Other	42 days	Bioaccumulation factor	9.6	Other methods
Triphenyl Phosphate	115-86-6	Experimental BCF - Rainbow Tr	90 days	Bioaccumulation factor	271	Other methods
Ethylbenzene	100-41-4	Experimental BCF - Other		Bioaccumulation factor	15	Other methods
Xylene	1330-20-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Distillates (petroleum), hydrotreated middle	64742-46-7	Estimated Bioconcentration		Log Kow	4.61	Estimated: Octanol-water partition coefficient
Aluminium hydroxide	21645-51-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

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)
080501* Waste isocyanates

SECTION 14: Transportation information

GR-2001-4027-9

ADR/RID: UN1263, PAINT RELATED MATERIAL, LIMITED QUANTITY, 3., III, (E), ADR Classification Code: F1.
IMDG-CODE: UN1263, PAINT RELATED MATERIAL, 3, III, IMDG-Code segregation code: NONE, LIMITED QUANTITY, 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 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

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.
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.
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.
R62	Possible risk of impaired fertility.
R63	Possible risk of harm to the unborn child.
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:
Section 1: Product identification numbers heading information was modified.
Section 1: Product identification numbers information was modified.
Section 16: List of relevant R phrase information information was modified.
Section 3: Composition/ Information of ingredients table information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Label: CLP Precautionary - Prevention information was modified.
Label: CLP Precautionary - Response 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.
Legend description information was added.
BLV Reg Agency Desc 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.

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