



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

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

1.1. Product identifier

3M™ Process Colour 990-10 Dark Blue

Product Identification Numbers

75-0300-8830-8

7000030820

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

Identified uses

Industrial use.

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

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.

CLASSIFICATION:

Flammable Liquid, Category 3 - Flam. Liq. 3; H226
 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
 Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318
 Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336

For full text of H phrases, see Section 16.

2.2. Label elements

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

SIGNAL WORD

DANGER.

Symbols

GHS02 (Flame) | GHS05 (Corrosion) | GHS07 (Exclamation mark) |

Pictograms



Ingredient	CAS Nbr	EC No.	% by Wt
2-methoxy-1-methylethyl acetate	108-65-6	203-603-9	10 - 30
cyclohexanone	108-94-1	203-631-1	10 - 30

HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.

PRECAUTIONARY STATEMENTS

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261A	Avoid breathing vapours.
P280A	Wear eye/face protection.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTRE or doctor/physician.

SUPPLEMENTAL INFORMATION:

Supplemental Hazard Statements:

EUH208	Contains 2,3-Epoxypropyl neodecanoate. Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-. triphenyl phosphite. dibutyltin dilaurate. May produce an allergic reaction.
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19% of the mixture consists of components of unknown acute inhalation toxicity.

2.3. Other hazards

None known.

This material does not contain any substances that are assessed to be a PBT or vPvB

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
Vinyl polymer	Trade Secret	10 - 30	Substance not classified as hazardous
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	(CAS-No.) 88917-22-0	10 - 30	Substance not classified as hazardous
cyclohexanone	(CAS-No.) 108-94-1 (EC-No.) 203-631-1	10 - 30	Flam. Liq. 3, H226 Acute Tox. 4, H332 Acute Tox. 4, H312 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318
2-methoxy-1-methylethyl acetate	(CAS-No.) 108-65-6 (EC-No.) 203-603-9	10 - 30	Flam. Liq. 3, H226 STOT SE 3, H336
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	(CAS-No.) 147-14-8 (EC-No.) 205-685-1	3 - 7	Substance not classified as hazardous
xylene	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7	3 - 7	Flam. Liq. 3, H226 Acute Tox. 4, H332 Acute Tox. 4, H312 Skin Irrit. 2, H315 Nota C Asp. Tox. 1, H304 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	(CAS-No.) 52829-07-9 (EC-No.) 258-207-9	< 0.5	Acute Tox. 3, H331 Eye Dam. 1, H318 Repr. 2, H361f Aquatic Acute 1, H400,M=1 Aquatic Chronic 2, H411
2,3-Epoxypropyl neodecanoate	(CAS-No.) 26761-45-5 (EC-No.) 247-979-2	< 0.4	Skin Sens. 1, H317 Muta. 2, H341 Aquatic Chronic 2, H411
triphenyl phosphite	(CAS-No.) 101-02-0 (EC-No.) 202-908-4	< 0.03	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1 Acute Tox. 4, H302

			Skin Sens. 1A, H317 STOT RE 2, H373
ZINC 2-ETHYLHEXANOATE	(CAS-No.) 136-53-8 (EC-No.) 205-251-1	< 0.2	Eye Irrit. 2, H319 Repr. 2, H361d Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
Calcium bis(2-ethylhexanoate)	(CAS-No.) 136-51-6 (EC-No.) 205-249-0	< 0.2	Eye Dam. 1, H318 Repr. 2, H361d
PHOSPHONIC ACID, DIPHENYL ESTER	(CAS-No.) 4712-55-4 (EC-No.) 225-202-8	< 0.2	Acute Tox. 4, H302 Aquatic Acute 1, H400,M=1
dibutyltin dilaurate	(CAS-No.) 77-58-7 (EC-No.) 201-039-8	< 0.2	Muta. 2, H341 Repr. 1B, H360FD STOT RE 1, H372 Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT SE 1, H370 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3- [3-(2H-benzotriazol-2-yl)-5-(1,1- dimethylethyl)-4-hydroxyphenyl]-1- oxopropyl]-.omega.-hydroxy-	(EC-No.) 400-830-7	< 1	Skin Sens. 1A, H317 Aquatic Chronic 2, H411

Please see section 16 for the full text of any H statements referred to in this section

Specific Concentration Limits

Ingredient	Identifier(s)	Specific Concentration Limits
triphenyl phosphite	(CAS-No.) 101-02-0 (EC-No.) 202-908-4	(C >= 5%) Skin Irrit. 2, H315 (C >= 5%) Eye Irrit. 2, H319

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

The most important symptoms and effects based on the GB CLP classification include:

Irritation to the skin (localized redness, swelling, itching, and dryness). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

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**

Hydrocarbons.
Carbon monoxide
Carbon dioxide.
Hydrogen Chloride

Condition

During combustion.
During combustion.
During combustion.
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. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

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 that is resistant to polar solvents. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. 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. 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
2-methoxy-1-methylethyl acetate	108-65-6	UK HSC	TWA:274 mg/m ³ (50 ppm);STEL:548 mg/m ³ (100 ppm)	SKIN
cyclohexanone	108-94-1	UK HSC	TWA:41 mg/m ³ (10 ppm);STEL:82 mg/m ³ (20 ppm)	SKIN
xylene	1330-20-7	UK HSC	TWA:220 mg/m ³ (50 ppm);STEL:441 mg/m ³ (100 ppm)	SKIN
Tin, organic compounds, except cyhexatin	77-58-7	UK HSC	TWA(as Sn):0.1 mg/m ³ ;STEL(as Sn):0.2 mg/m ³	SKIN

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
cyclohexanone	108-94-	UK EH40	Cyclohexanol	Creatinine in	EOS	2 mmol/mol	

xylene	1	BMGVs		urine	EOS	650 mmol/mol
	1330-20-7	UK EH40 BMGVs	Methyl hippuric acid	Creatinine in urine		

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:

Full face shield.

Indirect vented goggles.

Applicable Norms/Standards

Use eye/face protection conforming to EN 166

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

Applicable Norms/Standards

Use gloves tested to EN 374

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.

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136: filter types A & P

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Dark Blue
Odor	Solvent
Odour threshold	<i>No data available.</i>
Melting point/freezing point	<i>Not applicable.</i>
Boiling point/boiling range	≥ 138.3 °C
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	1 %
Flammable Limits(UEL)	12.75 %
Flash point	42.8 °C [<i>Test Method</i> : Tagliabue closed cup]
Autoignition temperature	<i>No data available.</i>
Decomposition temperature	<i>No data available.</i>
pH	<i>substance/mixture is non-soluble (in water)</i>
Kinematic Viscosity	1,340 mm ² /sec
Water solubility	<i>No data available.</i>
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Vapour pressure	≤ 895.9 Pa [<i>@ 20 °C</i>]
Density	0.97 g/ml [<i>@ 20 °C</i>]
Relative density	0.97 [<i>Ref Std</i> : WATER=1]
Relative Vapour Density	≥ 3.4 [<i>Ref Std</i> : AIR=1]

9.2. Other information**9.2.2 Other safety characteristics**

EU Volatile Organic Compounds	<i>No data available.</i>
Evaporation rate	≤ 1 [<i>Ref Std</i> : BUOAC=1]
Percent volatile	65 - 80 % weight

SECTION 10: Stability and reactivity**10.1 Reactivity**

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

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Sparks and/or flames.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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 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 hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

Signs and Symptoms of Exposure

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

Inhalation

May be harmful if inhaled. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact

May be harmful in contact with skin. Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact

Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion

May be harmful if swallowed.

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. Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

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.

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
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Overall product	Dermal		No data available; calculated ATE >2,000 - =5,000 mg/kg
Overall product	Inhalation-Vapour(4 hr)		No data available; calculated ATE >20 - =50 mg/l
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
cyclohexanone	Dermal	Rabbit	LD50 >794, <3160 mg/kg
cyclohexanone	Inhalation-Vapour (4 hours)	Rat	LC50 > 6.2 mg/l
cyclohexanone	Ingestion	Rat	LD50 1,296 mg/kg
2-methoxy-1-methylethyl acetate	Dermal	Rabbit	LD50 > 5,000 mg/kg
2-methoxy-1-methylethyl acetate	Inhalation-Vapour (4 hours)	Rat	LC50 > 28.8 mg/l
2-methoxy-1-methylethyl acetate	Ingestion	Rat	LD50 8,532 mg/kg
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Dermal	Rat	LD50 > 2,000 mg/kg
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.7 mg/l
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Ingestion	Rat	LD50 > 5,000 mg/kg
Vinyl polymer	Dermal	Rabbit	LD50 > 8,000 mg/kg
Vinyl polymer	Ingestion	Rat	LD50 > 8,000 mg/kg
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Dermal		LD50 estimated to be > 5,000 mg/kg
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Rat	LD50 10,000 mg/kg
xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
xylene	Inhalation-Vapour (4 hours)	Rat	LC50 29 mg/l
xylene	Ingestion	Rat	LD50 3,523 mg/kg
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	Dermal	Rat	LD50 > 2,000 mg/kg
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.8 mg/l
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	Ingestion	Rat	LD50 > 5,000 mg/kg
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Dermal	Rat	LD50 > 3,170 mg/kg
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.5 mg/l
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Ingestion	Rat	LD50 3,700 mg/kg
2,3-Epoxypropyl neodecanoate	Dermal	Rat	LD50 > 2,000 mg/kg
2,3-Epoxypropyl neodecanoate	Ingestion	Rat	LD50 > 2,000 mg/kg
PHOSPHONIC ACID, DIPHENYL ESTER	Dermal	Rabbit	LD50 > 2,000 mg/kg
PHOSPHONIC ACID, DIPHENYL ESTER	Ingestion	Rat	LD50 600 mg/kg
ZINC 2-ETHYLHEXANOATE	Dermal		LD50 estimated to be > 5,000 mg/kg
ZINC 2-ETHYLHEXANOATE	Ingestion	Rat	LD50 > 5,000 mg/kg
Calcium bis(2-ethylhexanoate)	Dermal	Rabbit	LD50 > 5,000 mg/kg
Calcium bis(2-ethylhexanoate)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.2 mg/l
Calcium bis(2-ethylhexanoate)	Ingestion	Rat	LD50 > 5,000 mg/kg
dibutyltin dilaurate	Dermal	Rat	LD50 > 2,000 mg/kg
dibutyltin dilaurate	Ingestion	Rat	LD50 1,290 mg/kg
triphenyl phosphite	Dermal	Rabbit	LD50 > 2,000 mg/kg
triphenyl phosphite	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.7 mg/l
triphenyl phosphite	Ingestion	Rat	LD50 1,590 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
cyclohexanone	Rabbit	Irritant
2-methoxy-1-methylethyl acetate	Rabbit	No significant irritation
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Rabbit	No significant irritation
Vinyl polymer	Professional judgement	No significant irritation
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Rabbit	No significant irritation
xylene	Rabbit	Mild irritant
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	Rabbit	No significant irritation
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Rabbit	No significant irritation
2,3-Epoxypropyl neodecanoate	Rabbit	No significant irritation
ZINC 2-ETHYLHEXANOATE	Rabbit	Mild irritant
Calcium bis(2-ethylhexanoate)	Rabbit	No significant irritation
dibutyltin dilaurate	Rabbit	Corrosive
triphenyl phosphite	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
cyclohexanone	In vitro data	Corrosive
2-methoxy-1-methylethyl acetate	Rabbit	Mild irritant
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Rabbit	No significant irritation
Vinyl polymer	Professional judgement	No significant irritation
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Rabbit	No significant irritation
xylene	Rabbit	Mild irritant
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	Rabbit	No significant irritation
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Rabbit	Corrosive
2,3-Epoxypropyl neodecanoate	Rabbit	No significant irritation
ZINC 2-ETHYLHEXANOATE	Rabbit	Severe irritant
Calcium bis(2-ethylhexanoate)	Rabbit	Corrosive
dibutyltin dilaurate	Rabbit	Corrosive
triphenyl phosphite	Rabbit	Moderate irritant

Skin Sensitisation

Name	Species	Value
cyclohexanone	Guinea pig	Not classified
2-methoxy-1-methylethyl acetate	Guinea pig	Not classified
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Guinea pig	Not classified
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Human	Not classified
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	Guinea pig	Sensitising
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Guinea pig	Not classified
2,3-Epoxypropyl neodecanoate	Guinea	Sensitising

	pig	
dibutyltin dilaurate	Guinea pig	Sensitising
triphenyl phosphite	Mouse	Sensitising

Photosensitisation

Name	Species	Value
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Guinea pig	Not sensitising

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
cyclohexanone	In vivo	Not mutagenic
cyclohexanone	In Vitro	Some positive data exist, but the data are not sufficient for classification
2-methoxy-1-methylethyl acetate	In Vitro	Not mutagenic
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	In Vitro	Not mutagenic
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	In vivo	Not mutagenic
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	In Vitro	Not mutagenic
xylene	In Vitro	Not mutagenic
xylene	In vivo	Not mutagenic
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	In Vitro	Not mutagenic
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	In vivo	Not mutagenic
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	In Vitro	Not mutagenic
2,3-Epoxypropyl neodecanoate	In Vitro	Some positive data exist, but the data are not sufficient for classification
2,3-Epoxypropyl neodecanoate	In vivo	Mutagenic
Calcium bis(2-ethylhexanoate)	In Vitro	Not mutagenic
dibutyltin dilaurate	In Vitro	Some positive data exist, but the data are not sufficient for classification
dibutyltin dilaurate	In vivo	Mutagenic
triphenyl phosphite	In Vitro	Not mutagenic
triphenyl phosphite	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
cyclohexanone	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Mouse	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

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
cyclohexanone	Inhalation	Not classified for female reproduction	Rat	NOAEL 4 mg/l	2 generation

cyclohexanone	Inhalation	Not classified for male reproduction	Rat	NOAEL 2 mg/l	2 generation
cyclohexanone	Ingestion	Not classified for development	Mouse	LOAEL 1,100 mg/kg/day	during organogenesis
cyclohexanone	Inhalation	Not classified for development	Rat	NOAEL 2 mg/l	2 generation
2-methoxy-1-methylethyl acetate	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
2-methoxy-1-methylethyl acetate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
2-methoxy-1-methylethyl acetate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
2-methoxy-1-methylethyl acetate	Inhalation	Not classified for development	Rat	NOAEL 21.6 mg/l	during organogenesis
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	42 days
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
xylene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
xylene	Ingestion	Not classified for development	Mouse	NOAEL Not available	during organogenesis
xylene	Inhalation	Not classified for development	Multiple animal species	NOAEL Not available	during gestation
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	Ingestion	Not classified for female reproduction	Rat	NOAEL 100 mg/kg/day	premating into lactation
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	Ingestion	Not classified for male reproduction	Rat	NOAEL 100 mg/kg/day	115 days
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	Ingestion	Not classified for development	Rat	NOAEL 2 mg/kg/day	premating into lactation
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Ingestion	Not classified for male reproduction	Rat	NOAEL 430 mg/kg/day	2 generation
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Ingestion	Not classified for development	Rat	NOAEL 130 mg/kg/day	2 generation
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Ingestion	Toxic to female reproduction	Rat	NOAEL 130 mg/kg/day	2 generation
ZINC 2-ETHYLHEXANOATE	Ingestion	Not classified for female reproduction	similar compounds	NOAEL 800 mg/kg/day	2 generation
ZINC 2-ETHYLHEXANOATE	Ingestion	Not classified for male reproduction	similar compounds	NOAEL 800 mg/kg/day	2 generation
ZINC 2-ETHYLHEXANOATE	Ingestion	Toxic to development	similar compounds	NOAEL 100 mg/kg/day	during gestation
Calcium bis(2-ethylhexanoate)	Ingestion	Not classified for female reproduction	similar compounds	NOAEL 800 mg/kg/day	2 generation
Calcium bis(2-ethylhexanoate)	Ingestion	Not classified for male reproduction	similar	NOAEL 800	2 generation

			compound	mg/kg/day	
Calcium bis(2-ethylhexanoate)	Ingestion	Toxic to development	similar compounds	NOAEL 100 mg/kg/day	during gestation
dibutyltin dilaurate	Ingestion	Toxic to female reproduction	Rat	NOAEL 2 mg/kg/day	premating into lactation
dibutyltin dilaurate	Ingestion	Toxic to development	Rat	NOAEL 2.5 mg/kg/day	during gestation
triphenyl phosphite	Ingestion	Not classified for female reproduction	Rat	NOAEL 40 mg/kg/day	premating into lactation
triphenyl phosphite	Ingestion	Not classified for male reproduction	Rat	NOAEL 40 mg/kg/day	28 days
triphenyl phosphite	Ingestion	Not classified for development	Rat	NOAEL 40 mg/kg/day	during gestation

Lactation

Name	Route	Species	Value
xylene	Ingestion	Mouse	Not classified for 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
cyclohexanone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Guinea pig	LOAEL 16.1 mg/l	6 hours
cyclohexanone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
cyclohexanone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	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	
2-methoxy-1-methylethyl acetate	Ingestion	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL not available	
xylene	Inhalation	auditory system	Causes damage to organs	Rat	LOAEL 6.3 mg/l	8 hours
xylene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
xylene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
xylene	Inhalation	eyes	Not classified	Rat	NOAEL 3.5 mg/l	not available
xylene	Inhalation	liver	Not classified	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	Not classified	Rat	NOAEL 250 mg/kg	not applicable
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Dermal	photoirritation	Not classified	Mouse	NOAEL not available	
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
ZINC 2-ETHYLHEXANOATE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	

Calcium bis(2-ethylhexanoate)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
dibutyltin dilaurate	Ingestion	immune system	Causes damage to organs	Rat	LOAEL 5 mg/kg	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
cyclohexanone	Inhalation	liver kidney and/or bladder	Not classified	Rabbit	NOAEL 0.76 mg/l	50 days
cyclohexanone	Ingestion	liver	Not classified	Mouse	NOAEL 4,800 mg/kg/day	90 days
2-methoxy-1-methylethyl acetate	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 16.2 mg/l	9 days
2-methoxy-1-methylethyl acetate	Inhalation	olfactory system	Not classified	Mouse	LOAEL 1.62 mg/l	9 days
2-methoxy-1-methylethyl acetate	Inhalation	blood	Not classified	Multiple animal species	NOAEL 16.2 mg/l	9 days
2-methoxy-1-methylethyl acetate	Ingestion	endocrine system	Not classified	Rat	NOAEL 1,000 mg/kg/day	44 days
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Ingestion	liver heart endocrine system hematopoietic system kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	4 weeks
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	endocrine system hematopoietic system respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	not available
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	Not classified	Multiple animal species	NOAEL Not available	
xylene	Inhalation	heart endocrine system gastrointestinal tract hematopoietic system muscles kidney and/or bladder respiratory system	Not classified	Multiple animal species	NOAEL 3.5 mg/l	13 weeks
xylene	Ingestion	auditory system	Not classified	Rat	NOAEL 900 mg/kg/day	2 weeks
xylene	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 1,500 mg/kg/day	90 days
xylene	Ingestion	liver	Not classified	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	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks

		system				
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	Ingestion	liver endocrine system hematopoietic system eyes kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 50 mg/kg/day	90 days
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Ingestion	heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	Rat	NOAEL 261 mg/kg/day	90 days
2,3-Epoxypropyl neodecanoate	Ingestion	hematopoietic system liver	Not classified	Rat	NOAEL 400 mg/kg/day	5 weeks
2,3-Epoxypropyl neodecanoate	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 40 mg/kg/day	5 weeks
dibutyltin dilaurate	Ingestion	liver	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 2 mg/kg/day	2 weeks
dibutyltin dilaurate	Ingestion	immune system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.3 mg/kg/day	28 days
triphenyl phosphite	Ingestion	nervous system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 15 mg/kg/day	28 days
triphenyl phosphite	Ingestion	hematopoietic system kidney and/or bladder	Not classified	Rat	NOAEL 40 mg/kg/day	28 days

Aspiration Hazard

Name	Value
xylene	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.

11.2. Information on other hazards

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

SECTION 12: Ecological information

The information below may not agree with the 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 #	Organism	Type	Exposure	Test endpoint	Test result
2-methoxy-1-methylethyl acetate	108-65-6	Activated sludge	Experimental	30 minutes	EC10	>1,000 mg/l

2-methoxy-1-methylethyl acetate	108-65-6	Green algae	Experimental	72 hours	ErC50	>1,000 mg/l
2-methoxy-1-methylethyl acetate	108-65-6	Rainbow trout	Experimental	96 hours	LC50	134 mg/l
2-methoxy-1-methylethyl acetate	108-65-6	Water flea	Experimental	48 hours	EC50	370 mg/l
2-methoxy-1-methylethyl acetate	108-65-6	Green algae	Experimental	72 hours	NOEC	1,000 mg/l
2-methoxy-1-methylethyl acetate	108-65-6	Water flea	Experimental	21 days	NOEC	100 mg/l
cyclohexanone	108-94-1	Activated sludge	Experimental	30 minutes	EC50	>1,000 mg/l
cyclohexanone	108-94-1	Algae or other aquatic plants	Experimental	72 hours	ErC50	32.9 mg/l
cyclohexanone	108-94-1	Fathead minnow	Experimental	96 hours	LC50	527 mg/l
cyclohexanone	108-94-1	Water flea	Experimental	24 hours	EC50	800 mg/l
cyclohexanone	108-94-1	Algae or other aquatic plants	Experimental	72 hours	ErC10	3.56 mg/l
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Green algae	Experimental	72 hours	ErC50	>1,000 mg/l
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Rainbow trout	Experimental	96 hours	LC50	111 mg/l
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Water flea	Experimental	48 hours	LC50	1,090 mg/l
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Green algae	Experimental	72 hours	NOEC	1,000 mg/l
Vinyl polymer	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Green algae	Estimated	72 hours	ErC50	>100 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Water flea	Estimated	48 hours	EC50	>500 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Activated sludge	Experimental	30 minutes	EC20	750 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Bacteria	Experimental	30 minutes	EC10	>10,000 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Rainbow trout	Experimental	96 hours	LC50	355.6 mg/l

29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Green algae	Estimated	72 hours	ErC10	100 mg/l
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Water flea	Estimated	21 days	NOEC	>=1 mg/l
xylene	1330-20-7	Activated sludge	Estimated	3 hours	NOEC	157 mg/l
xylene	1330-20-7	Green algae	Estimated	72 hours	EC50	4.36 mg/l
xylene	1330-20-7	Rainbow trout	Estimated	96 hours	LC50	2.6 mg/l
xylene	1330-20-7	Water flea	Estimated	48 hours	EC50	3.82 mg/l
xylene	1330-20-7	Green algae	Estimated	72 hours	NOEC	0.44 mg/l
xylene	1330-20-7	Water flea	Estimated	7 days	NOEC	0.96 mg/l
xylene	1330-20-7	Rainbow trout	Experimental	56 days	NOEC	>1.3 mg/l
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	52829-07-9	Bluegill	Experimental	96 hours	LC50	4.4 mg/l
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	52829-07-9	Green algae	Experimental	72 hours	EC50	0.705 mg/l
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	52829-07-9	Water flea	Experimental	48 hours	EC50	8.58 mg/l
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	52829-07-9	Green algae	Experimental	72 hours	EC10	0.188 mg/l
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	52829-07-9	Water flea	Experimental	21 days	NOEC	0.23 mg/l
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	52829-07-9	Activated sludge	Experimental	3 hours	IC50	>100
2,3-Epoxypropyl neodecanoate	26761-45-5	Activated sludge	Experimental	3 hours	NOEC	500 mg/l
2,3-Epoxypropyl neodecanoate	26761-45-5	Green algae	Experimental	72 hours	ErC50	2.9 mg/l
2,3-Epoxypropyl neodecanoate	26761-45-5	Rainbow trout	Experimental	96 hours	LC50	5 mg/l
2,3-Epoxypropyl neodecanoate	26761-45-5	Water flea	Experimental	48 hours	EC50	4.8 mg/l
2,3-Epoxypropyl neodecanoate	26761-45-5	Green algae	Experimental	96 hours	NOEC	1 mg/l
triphenyl phosphite	101-02-0	Green algae	Experimental	72 hours	EC50	>16 mg/l
triphenyl phosphite	101-02-0	Medaka	Experimental	96 hours	LC50	>4.3 mg/l
triphenyl phosphite	101-02-0	Water flea	Experimental	48 hours	EC50	0.45 mg/l
triphenyl phosphite	101-02-0	Green algae	Experimental	72 hours	NOEC	16 mg/l
Calcium bis(2-ethylhexanoate)	136-51-6	Activated sludge	Transformation Product	30 minutes	EC20	740 mg/l
Calcium bis(2-ethylhexanoate)	136-51-6	Green algae	Transformation Product	72 hours	ErC50	56 mg/l
Calcium bis(2-ethylhexanoate)	136-51-6	Medaka	Transformation Product	96 hours	LC50	>113 mg/l
Calcium bis(2-ethylhexanoate)	136-51-6	Water flea	Transformation Product	48 hours	EC50	97 mg/l

Calcium bis(2-ethylhexanoate)	136-51-6	Green algae	Transformation Product	96 hours	ErC10	28 mg/l
Calcium bis(2-ethylhexanoate)	136-51-6	Water flea	Transformation Product	21 days	NOEC	28 mg/l
dibutyltin dilaurate	77-58-7	Zebra Fish	Endpoint not reached	96 hours	LC50	>100 mg/l
dibutyltin dilaurate	77-58-7	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
dibutyltin dilaurate	77-58-7	Water flea	Experimental	48 hours	IC50	0.17 mg/l
dibutyltin dilaurate	77-58-7	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
PHOSPHONIC ACID, DIPHENYL ESTER	4712-55-4	Green algae	Analogous Compound	72 hours	EC50	>16 mg/l
PHOSPHONIC ACID, DIPHENYL ESTER	4712-55-4	Medaka	Analogous Compound	96 hours	LC50	>4.3 mg/l
PHOSPHONIC ACID, DIPHENYL ESTER	4712-55-4	Water flea	Analogous Compound	48 hours	EC50	0.45 mg/l
PHOSPHONIC ACID, DIPHENYL ESTER	4712-55-4	Green algae	Analogous Compound	72 hours	NOEC	16 mg/l
ZINC 2-ETHYLHEXANOATE	136-53-8	Rainbow trout	Experimental	96 hours	LC50	0.44 mg/l
ZINC 2-ETHYLHEXANOATE	136-53-8	Water flea	Experimental	48 hours	EC50	1.6 mg/l
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	400-830-7	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	400-830-7	Green algae	Experimental	72 hours	EC50	>100 mg/l
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	400-830-7	Rainbow trout	Experimental	96 hours	LC50	2.8 mg/l
Reaction mass of Polymeric benzotriazole and	400-830-7	Water flea	Experimental	48 hours	EC50	4 mg/l

Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-						
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	400-830-7	Green algae	Experimental	72 hours	ErC10	10 mg/l
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	400-830-7	Water flea	Experimental	21 days	NOEC	0.78 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
2-methoxy-1-methylethyl acetate	108-65-6	Experimental Biodegradation	28 days	BOD	87.2 %BOD/ThOD	OECD 301C - MITI test (I)
2-methoxy-1-methylethyl acetate	108-65-6	Experimental Aquatic Inherent Biodegrad.		Dissolv. Organic Carbon Deplet	>100 %removal of DOC	similar to OECD 302B
cyclohexanone	108-94-1	Experimental Biodegradation	14 days	BOD	87 %BOD/ThOD	OECD 301C - MITI test (I)
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Analogous Compound Biodegradation	28 days	Dissolv. Organic Carbon Deplet	90 %removal of DOC	OECD 301F - Manometric respirometry
Vinyl polymer	Trade Secret	Data not availbl-insufficient	N/A	N/A	N/A	N/A
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Experimental Biodegradation	28 days	BOD	<1 %BOD/ThOD	OECD 301F - Manometric respirometry
xylene	1330-20-7	Experimental Biodegradation	28 days	BOD	90-98 %BOD/ThOD	OECD 301F - Manometric respirometry
xylene	1330-20-7	Experimental Photolysis		Photolytic half-life (in air)	1.4 days (t 1/2)	
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	52829-07-9	Experimental Biodegradation	28 days	Percent degraded	24 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	52829-07-9	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	56.6 days (t 1/2)	OECD 111 Hydrolysis func of pH
2,3-Epoxypropyl neodecanoate	26761-45-5	Experimental Biodegradation	28 days	BOD	11.6 %BOD/ThOD	OECD 301F - Manometric respirometry

2,3-Epoxypropyl neodecanoate	26761-45-5	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	9.9 days (t 1/2)	OECD 111 Hydrolysis func of pH
triphenyl phosphite	101-02-0	Estimated Biodegradation	14 days	BOD	85 %BOD/ThOD	OECD 301C - MITI test (I)
triphenyl phosphite	101-02-0	Experimental Hydrolysis		Hydrolytic half-life	0.5 hours (t 1/2)	
Calcium bis(2-ethylhexanoate)	136-51-6	Transformation product Biodegradation	28 days	Dissolv. Organic Carbon Deplet	99 %removal of DOC	OECD 301E - Modif. OECD Screen
dibutyltin dilaurate	77-58-7	Experimental Biodegradation	39 days	BOD	23 %BOD/ThOD	OECD 301F - Manometric respirometry
dibutyltin dilaurate	77-58-7	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	≤1 hours (t 1/2)	
PHOSPHONIC ACID, DIPHENYL ESTER	4712-55-4	Analogous Compound Biodegradation	28 days	BOD	84 %BOD/ThOD	OECD 301D - Closed bottle test
ZINC 2-ETHYLHEXANOATE	136-53-8	Transformation product Biodegradation	20 days	BOD	83 %BOD/ThOD	OECD 301D - Closed bottle test
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	400-830-7	Experimental Biodegradation	28 days	CO2 evolution	12-24 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
2-methoxy-1-methylethyl acetate	108-65-6	Experimental Bioconcentration		Log Kow	0.36	OECD 107 log Kow shke flask mtd
cyclohexanone	108-94-1	Experimental Bioconcentration		Log Kow	0.86	OECD 107 log Kow shke flask mtd
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Experimental Bioconcentration		Log Kow	0.61	EC A.8 Partition Coefficient
Vinyl polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Experimental BCF - Fish	42 days	Bioaccumulation factor	<3.6	OECD305-Bioconcentration
xylene	1330-20-7	Experimental BCF - Fish	56 days	Bioaccumulation factor	25.9	
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	52829-07-9	Experimental Bioconcentration		Log Kow	0.35	OECD 107 log Kow shke flask mtd
2,3-Epoxypropyl neodecanoate	26761-45-5	Modeled Bioconcentration		Bioaccumulation factor	28	Catalogic™
triphenyl phosphite	101-02-0	Estimated Bioconcentration		Bioaccumulation factor	13800	
Calcium bis(2-ethylhexanoate)	136-51-6	Transformation product Bioconcentration		Log Kow	2.7	similar to OECD 107
dibutyltin dilaurate	77-58-7	Experimental BCF - Fish	56 days	Bioaccumulation factor	≤110	similar to OECD 305
dibutyltin dilaurate	77-58-7	Experimental Bioconcentration		Log Kow	4.44	OECD 107 log Kow shke flask mtd

PHOSPHONIC ACID, DIPHENYL ESTER	4712-55-4	Modeled Bioconcentration		Log Kow	2.4	Episuite™
ZINC 2-ETHYLHEXANOATE	136-53-8	Estimated Bioconcentration		Log Kow	2.7	
Reaction mass of Polymeric benzotriazole and Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	400-830-7	Experimental BCF - Fish	21 days	Bioaccumulation factor	34	OECD305-Bioconcentration

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
2-methoxy-1-methylethyl acetate	108-65-6	Experimental Mobility in Soil	Koc	4 l/kg	Episuite™
cyclohexanone	108-94-1	Modeled Mobility in Soil	Koc	39 l/kg	Episuite™
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Experimental Mobility in Soil	Koc	187 l/kg	OECD 121 Estim. of Koc by HPLC
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	Modeled Mobility in Soil	Koc	10,000,000,000 l/kg	Episuite™
bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	52829-07-9	Experimental Mobility in Soil	Koc	780-16000 l/kg	OECD 106 Adsp-Desb Batch Equil
2,3-Epoxypropyl neodecanoate	26761-45-5	Experimental Mobility in Soil	Koc	143 l/kg	OECD 121 Estim. of Koc by HPLC
PHOSPHONIC ACID, DIPHENYL ESTER	4712-55-4	Modeled Mobility in Soil	Koc	180 l/kg	Episuite™

12.5. Results of the PBT and vPvB assessment

This material does not contain any substances that are assessed to be a PBT or vPvB

12.6. Other adverse effects

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

Incinerate in a permitted waste incineration facility. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. 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)

080312* Waste ink containing dangerous substances

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN1210	UN1210	UN1210
14.2 UN proper shipping name	PRINTING INK	PRINTING INK	PRINTING INK
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	III	III	III
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	F1	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

SECTION 15: Regulatory information

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

Carcinogenicity

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
cyclohexanone	108-94-1	Gr. 3: Not classifiable	International Agency for Research on Cancer
xylene	1330-20-7	Gr. 3: Not classifiable	International Agency for Research on Cancer

Restrictions on the manufacture, placing on the market and use:

The following substance(s) contained in this product is/are subject to Annex XVII of regulation (EC) 1907/2006, as amended for GB, with regard to restrictions on the manufacture, placing on the market and use when present in certain dangerous conditions. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

<u>Ingredient</u>	<u>CAS Nbr</u>
xylene	1330-20-7

Restriction status: listed in UK REACH Annex XVII

Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 as amended for Great Britain for Conditions of Restriction

Global inventory status

Contact 3M for more information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for the application of	
	Lower-tier requirements	Upper-tier requirements
P5c FLAMMABLE LIQUIDS*	5000	50000

*If maintained at a temperature above its boiling point or if particular processing conditions, such as high pressure or high temperature, may create major-accident hazards, P5a or P5b FLAMMABLE LIQUIDS may apply
Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
2-methoxy-1-methylethyl acetate	108-65-6	10	50
cyclohexanone	108-94-1	10	50
triphenyl phosphite	101-02-0	100	200
xylene	1330-20-7	10	50

Regulation (EU) No 649/2012, as amended for GB

Chemical	Identifier(s)	Annex I
dibutyltin dilaurate	77-58-7	Part 1

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

SECTION 16: Other information

List of relevant H statements

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H360FD	May damage fertility. May damage the unborn child.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H370	Causes damage to organs.
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:

GB Section 02: CLP Ingredient table information was added.

GB Section 02: Other hazards phrase information was added.

GB Section 04: First Aid - Symptoms and Effects (GB CLP) information was added.

GB Section 04: Information on toxicological effects information was added.

GB Section 12: Classification Warning information was added.

GB Section 15: Carcinogenicity information information was added.

GB Section 15: Chemical Safety Assessment information was added.

GBSDS Section 14 Transport in bulk - Main Heading information was added.

GBSDS Section 14 UN Number information was added.

Professional Screen Printing with UV Curable Coatings: Section 16: Annex information was deleted.

Professional Use of Coatings: Section 16: Annex information was deleted.

CLP: Ingredient table information was deleted.

Contains statement for sensitizers information was added.

Contains statement for sensitizers information was deleted.

Label: CLP Percent Unknown information was deleted.

Section 02: Label Elements: GB Percent Unknown information was added.

List of sensitizers information was added.

List of sensitizers information was deleted.

Section 2: Other hazards phrase information was deleted.

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

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

Section 03: SCL table information was added.

Section 03: SCL table information was deleted.

Section 04: First Aid - Symptoms and Effects (CLP) information was deleted.

Section 04: Information on toxicological effects information was deleted.

Section 8: 8.2. Exposure controls information information was deleted.

Section 8: 8.2.3. Environmental exposure controls information information was deleted.

Section 8: DNEL table row information was deleted.

Section 8: PNEC table row information was deleted.

Section 11: Classification disclaimer information was deleted.

Section 11: GB Classification disclaimer information was added.

Section 11: GB No endocrine disruptor information available warning information was added.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: No endocrine disruptor information available warning information was deleted.

Section 11: Reproductive Toxicity Table information was modified.

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

Section 12: 12.6. Endocrine Disrupting Properties information was deleted.

Section 12: 12.6. Other adverse effects information was added.

Section 12: 12.7. Other adverse effects information was deleted.

Section 12: Classification Warning information was deleted.

Section 12: Component ecotoxicity information information was modified.

Prints No Data if Adverse effects information is not present information was deleted.

Section 12: No endocrine disruptor information available warning information was added.

Section 12: No endocrine disruptor information available warning information was deleted.

Section 12: Persistence and Degradability information information was modified.

Section 12: Bioaccumulative potential information information was modified.

Section 14 Marine transport in bulk according to IMO instruments – Main Heading information was deleted.

Section 14 UN Number information was deleted.

Section 15: Carcinogenicity information information was deleted.

Section 15: Chemical Safety Assessment information was deleted.

Section 15: Seveso Hazard Category Text information was added.

Section 15: Seveso Hazard Category Text information was deleted.

Section 15: Seveso Substance Text information was added.

Section 15: Seveso Substance Text information was deleted.

Annex: Prediction of exposure statement information was deleted.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was added.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was deleted.

Section 16: Web address information was added.

Section 16: Web address information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

3M SDSs for Great Britain are available at www.3M.com/uk

For Northern Ireland documents, please contact your 3M representative to obtain a copy.

