



## Safety Data Sheet

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<b>Document group:</b>	11-8902-6	<b>Version number:</b>	11.00
<b>Revision date:</b>	18/03/2018	<b>Supersedes date:</b>	06/12/2017
<b>Transportation version number:</b>	2.00 (04/08/2015)		

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 Process Colour 990-04, Yellow

#### Product Identification Numbers

75-0300-8073-5

7000004842

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

##### Identified uses

Ink

#### 1.3. Details of the supplier of the safety data sheet

**Address:** 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.  
**Telephone:** +44 (0)1344 858 000  
**E Mail:** tox.uk@mmm.com  
**Website:** www.3M.com/uk

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

##### CLASSIFICATION:

Flammable Liquid, Category 3 - Flam. Liq. 3; H226  
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

For full text of H phrases, see Section 16.

#### 2.2. Label elements

**CLP REGULATION (EC) No 1272/2008**

**SIGNAL WORD**

WARNING.

**Symbols:**

GHS02 (Flame) |GHS07 (Exclamation mark) |

**Pictograms**



**HAZARD STATEMENTS:**

H226 Flammable liquid and vapour.  
 H319 Causes serious eye irritation.  
 H315 Causes skin irritation.

**PRECAUTIONARY STATEMENTS**

**Prevention:**

P210A Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**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.  
 P370 + P378G In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

**Disposal:**

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

**SUPPLEMENTAL INFORMATION**

**Supplemental Hazard Statements:**

EUH208 Contains 2,3-Epoxypropyl neodecanoate. | Polymeric benzotriazole. | Poly(oxy-1,2-ethanediyl),  $\alpha$ -[3-[3-(2H- benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4- hydroxyphenyl]-1-oxopropyl]- $\omega$ -hydroxy-. | Triphenyl Phosphite. May produce an allergic reaction.

4% of the mixture consists of components of unknown acute inhalation toxicity.

**2.3. Other hazards**

None known.

**SECTION 3: Composition/information on ingredients**

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
Propanol, 1(or 2)-(2-	88917-22-0		01-	15 - 40	Substance not classified as

**3M Process Colour 990-04, Yellow**

methoxymethylethoxy)-, acetate			0000015637-64		hazardous
Cyclohexanone	108-94-1	203-631-1	01-2119453616-35	15 - 40	Flam. Liq. 3, H226; Acute Tox. 4, H332 Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319
Vinyl polymer	Trade Secret			10 - 30	Substance not classified as hazardous
2-Methoxy-1-methylethyl acetate	108-65-6	203-603-9	01-2119475791-29	10 - 30	Flam. Liq. 3, H226
2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with p-phenylenediamine and sodium methoxide	106276-80-6			3 - 7	Substance not classified as hazardous
Alkyd resin 3261	Trade Secret			3 - 7	Substance not classified as hazardous
Xylene	1330-20-7	215-535-7	01-2119488216-32	3 - 7	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315 - Nota C Aquatic Chronic 3, H412 Asp. Tox. 1, H304; Eye Irrit. 2, H319; STOT SE 3, H335; STOT RE 2, H373
2,4-Dihydroxybenzophenone	131-56-6	205-029-4		0.5 - 1.5	Aquatic Chronic 2, H411 Eye Irrit. 2, H319
Ethylbenzene	100-41-4	202-849-4		0.1 - 1	Flam. Liq. 2, H225; Acute Tox. 4, H332; Asp. Tox. 1, H304; STOT RE 2, H373 Aquatic Chronic 3, H412
Bis(2,2,6,6-Tetramethyl-4-piperidyl) sebacate	52829-07-9	258-207-9		0.1 - 1	Aquatic Acute 1, H400,M=1; Aquatic Chronic 2, H411 Acute Tox. 3, H331; Eye Dam. 1, H318
2,3-Epoxypropyl neodecanoate	26761-45-5	247-979-2		< 0.5	Skin Sens. 1, H317; Muta. 2, H341; Aquatic Chronic 2, H411
Polymeric benzotriazole	104810-47-1			< 0.4	Skin Sens. 1, H317
Poly(oxy-1,2-ethanediyl), $\alpha$ -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- $\omega$ -hydroxy-	104810-48-2			< 0.4	Skin Sens. 1, H317
Zinc bis(2-ethylhexanoate)	136-53-8	205-251-1		< 0.2	Aquatic Chronic 3, H412 Eye Irrit. 2, H319; Repr. 2, H361df
Calcium bis(2-ethylhexanoate)	136-51-6	205-249-0		< 0.2	Eye Dam. 1, H318; Repr. 2, H361df
Triphenyl Phosphite	101-02-0	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
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Please see section 16 for the full text of any H statements referred to in this section

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

#### Skin contact

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

#### Eye contact

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

#### If swallowed

Rinse mouth. If you feel unwell, get medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1 Information on toxicological effects

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

Not applicable

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

### 5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Hydrocarbons.	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Hydrogen Chloride	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. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

For industrial or professional use only. Do not 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.

**3M Process Colour 990-04, Yellow**

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Ethylbenzene	100-41-4	UK HSC	TWA:441 mg/m <sup>3</sup> (100 ppm);STEL:552 mg/m <sup>3</sup> (125 ppm)	SKIN
2-Methoxy-1-methylethyl acetate	108-65-6	UK HSC	TWA:274 mg/m <sup>3</sup> (50 ppm);STEL:548 mg/m <sup>3</sup> (100 ppm)	SKIN
Cyclohexanone	108-94-1	UK HSC	TWA:41 mg/m <sup>3</sup> (10 ppm);STEL:82 mg/m <sup>3</sup> (20 ppm)	SKIN
Xylene	1330-20-7	UK HSC	TWA:220 mg/m <sup>3</sup> (50 ppm);STEL:441 mg/m <sup>3</sup> (100 ppm)	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	108-94-1	UK EH40 BMGVs	Cyclohexanol	Creatinine in urine	EOS	2 mmol/mol	
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.

**Derived no effect level (DNEL)**

Ingredient	Degradation Product	Population	Human exposure pattern	DNEL
2-Methoxy-1-methylethyl acetate		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	796 mg/kg bw/d
2-Methoxy-1-methylethyl acetate		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	275 mg/m <sup>3</sup>
2-Methoxy-1-methylethyl acetate		Worker	Inhalation, Short-term exposure, Local effects	550 mg/m <sup>3</sup>
Xylene		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	180 mg/kg bw/d
Xylene		Worker	Inhalation, Long-term exposure (8 hours), Local effects	77 mg/m <sup>3</sup>
Xylene		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	77 mg/m <sup>3</sup>
Xylene		Worker	Inhalation, Short-term exposure, Local effects	289 mg/m <sup>3</sup>
Xylene		Worker	Inhalation, Short-term exposure, Systemic effects	289 mg/m <sup>3</sup>

**Predicted no effect concentrations (PNEC)**

Ingredient	Degradation	Compartment	PNEC

	Product		
2-Methoxy-1-methylethyl acetate		Agricultural soil	0.29 mg/kg d.w.
2-Methoxy-1-methylethyl acetate		Freshwater	0.635 mg/l
2-Methoxy-1-methylethyl acetate		Freshwater sediments	3.29 mg/kg d.w.
2-Methoxy-1-methylethyl acetate		Intermittent releases to water	6.35 mg/l
2-Methoxy-1-methylethyl acetate		Marine water	0.0635 mg/l
2-Methoxy-1-methylethyl acetate		Marine water sediments	0.329 mg/kg d.w.
2-Methoxy-1-methylethyl acetate		Sewage Treatment Plant	100 mg/l
Xylene		Agricultural soil	2.31 mg/kg d.w.
Xylene		Freshwater	0.327 mg/l
Xylene		Freshwater sediments	12.46 mg/kg d.w.
Xylene		Marine water	0.327 mg/l
Xylene		Marine water sediments	12.46 mg/kg d.w.
Xylene		Sewage Treatment Plant	6.58 mg/l

## 8.2. Exposure controls

In addition, refer to the annex for more information.

### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:  
Indirect vented goggles.

#### Applicable Norms/Standards

Use eye 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

### 8.2.3. Environmental exposure controls

Refer to Annex

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Liquid.
Appearance/Odour	Yellow; Solvent odour.
Odour threshold	No data available.
pH	Not applicable.
Boiling point/boiling range	>=138.3 °C
Melting point	Not applicable.
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	42.8 °C [Test Method:Tagliabue closed cup]
Autoignition temperature	No data available.
Flammable Limits(LEL)	1 %
Flammable Limits(UEL)	12.75 %
Vapour pressure	<=895.9 Pa [@ 20 °C ]
Relative density	0.97 [Ref Std:WATER=1]
Water solubility	Negligible
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Evaporation rate	<=1 [Ref Std:BUOAC=1]
Vapour density	>=3.4 [Ref Std:AIR=1]
Decomposition temperature	No data available.
Viscosity	1,300 - 1,500 mPa-s
Density	0.97 g/ml [@ 20 °C ]

### 9.2. Other information

EU Volatile Organic Compounds	No data available.
Molecular weight	No data available.
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>
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None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

### 11.1 Information on Toxicological effects

#### Signs and Symptoms of Exposure

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

#### Inhalation

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

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired 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
Overall product	Dermal		No data available; calculated ATE2,000 - 5,000 mg/kg
Overall product	Inhalation-Vapour(4 hr)		No data available; calculated ATE10 - 20 mg/l
Overall product	Ingestion		No data available; calculated ATE2,000 - 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
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
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
Vinyl polymer	Dermal	Rabbit	LD50 > 8,000 mg/kg
Vinyl polymer	Ingestion	Rat	LD50 > 8,000 mg/kg
2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with p-phenylenediamine and sodium methoxide	Dermal		LD50 estimated to be > 5,000 mg/kg
2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with p-phenylenediamine and sodium methoxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1 mg/l
2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with p-phenylenediamine and sodium methoxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Alkyd resin 3261	Dermal		LD50 estimated to be > 5,000 mg/kg
Alkyd resin 3261	Ingestion		LD50 estimated to be > 5,000 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
2,4-Dihydroxybenzophenone	Dermal		LD50 estimated to be > 5,000 mg/kg
2,4-Dihydroxybenzophenone	Ingestion	Rat	LD50 8,600 mg/kg

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Ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
Ethylbenzene	Inhalation-Vapour (4 hours)	Rat	LC50 17.4 mg/l
Ethylbenzene	Ingestion	Rat	LD50 4,769 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
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
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
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
Polymeric benzotriazole	Dermal	Rat	LD50 > 2,000 mg/kg
Polymeric benzotriazole	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.8 mg/l
Polymeric benzotriazole	Ingestion	Rat	LD50 > 5,000 mg/kg
Zinc bis(2-ethylhexanoate)	Dermal		LD50 estimated to be > 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
Zinc bis(2-ethylhexanoate)	Ingestion	Rat	LD50 > 5,000 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
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Rabbit	No significant irritation
2-Methoxy-1-methylethyl acetate	Rabbit	No significant irritation
Vinyl polymer	Professional judgement	No significant irritation
2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with p-phenylenediamine and sodium methoxide	Rabbit	No significant irritation
Xylene	Rabbit	Mild irritant
2,4-Dihydroxybenzophenone	Rabbit	No significant irritation
Ethylbenzene	Rabbit	Mild irritant
Bis(2,2,6,6-Tetramethyl-4-piperidyl) sebacate	Rabbit	No significant irritation
2,3-Epoxypropyl neodecanoate	Rabbit	No significant irritation
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
Polymeric benzotriazole	Rabbit	No significant irritation
Calcium bis(2-ethylhexanoate)	Rabbit	No significant irritation
Zinc bis(2-ethylhexanoate)	Rabbit	Mild irritant
Triphenyl Phosphite	Rabbit	Irritant

**Serious Eye Damage/Irritation**

Name	Species	Value
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### 3M Process Colour 990-04, Yellow

Cyclohexanone	Rabbit	Severe irritant
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Rabbit	No significant irritation
2-Methoxy-1-methylethyl acetate	Rabbit	Mild irritant
Vinyl polymer	Professional judgement	No significant irritation
2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with p-phenylenediamine and sodium methoxide	Rabbit	No significant irritation
Xylene	Rabbit	Mild irritant
2,4-Dihydroxybenzophenone	Rabbit	Severe irritant
Ethylbenzene	Rabbit	Moderate irritant
Bis(2,2,6,6-Tetramethyl-4-piperidyl) sebacate	Rabbit	Corrosive
2,3-Epoxypropyl neodecanoate	Rabbit	No significant irritation
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
Polymeric benzotriazole	Rabbit	No significant irritation
Calcium bis(2-ethylhexanoate)	Rabbit	Corrosive
Zinc bis(2-ethylhexanoate)	Rabbit	Severe irritant
Triphenyl Phosphite	Rabbit	Moderate irritant

### Skin Sensitisation

Name	Species	Value
Cyclohexanone	Guinea pig	Not classified
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Guinea pig	Not classified
2-Methoxy-1-methylethyl acetate	Guinea pig	Not classified
2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with p-phenylenediamine and sodium methoxide	Human	Not classified
Ethylbenzene	Human	Not classified
Bis(2,2,6,6-Tetramethyl-4-piperidyl) sebacate	Human	Not classified
2,3-Epoxypropyl neodecanoate	Guinea pig	Sensitising
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
Polymeric benzotriazole	Guinea pig	Sensitising
Triphenyl Phosphite	Mouse	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
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	In Vitro	Not mutagenic
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	In vivo	Not mutagenic
2-Methoxy-1-methylethyl acetate	In Vitro	Not mutagenic
2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with p-phenylenediamine and sodium methoxide	In Vitro	Not mutagenic
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
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

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Calcium bis(2-ethylhexanoate)	In Vitro	Not mutagenic
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**Carcinogenicity**

Name	Route	Species	Value
Cyclohexanone	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Xylene	Dermal	Rat	Not carcinogenic
Xylene	Ingestion	Multiple animal species	Not carcinogenic
Xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic.

**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	prematuring & during gestation
2-Methoxy-1-methylethyl acetate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
2-Methoxy-1-methylethyl acetate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
2-Methoxy-1-methylethyl acetate	Inhalation	Not classified for development	Rat	NOAEL 21.6 mg/l	during organogenesis
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
Ethylbenzene	Inhalation	Not classified for development	Rat	NOAEL 4.3 mg/l	prematuring & during gestation
Calcium bis(2-ethylhexanoate)	Ingestion	Toxic to female reproduction	Rat	NOAEL 300 mg/kg/day	1 generation
Calcium bis(2-ethylhexanoate)	Ingestion	Toxic to male reproduction	Rat	NOAEL 300 mg/kg/day	1 generation
Calcium bis(2-ethylhexanoate)	Ingestion	Toxic to development	Rat	NOAEL 100 mg/kg/day	1 generation
Zinc bis(2-ethylhexanoate)	Ingestion	Toxic to female reproduction	Rat	NOAEL 300 mg/kg/day	1 generation
Zinc bis(2-ethylhexanoate)	Ingestion	Toxic to male reproduction	Rat	NOAEL 300 mg/kg/day	1 generation
Zinc bis(2-ethylhexanoate)	Ingestion	Toxic to development	Rat	NOAEL 100 mg/kg/day	1 generation

**Lactation**

**3M Process Colour 990-04, Yellow**

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	
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
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	
Ethylbenzene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	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	
Zinc bis(2-ethylhexanoate)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	

**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
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Ingestion	liver   heart   endocrine system   hematopoietic system   kidney	Not classified	Rat	NOAEL 1,000 mg/kg/day	4 weeks

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		and/or bladder				
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
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 system	Not classified	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	Not classified	Rat	NOAEL 3.4 mg/l	28 days
Ethylbenzene	Inhalation	auditory system	Not classified	Rat	NOAEL 2.4 mg/l	5 days
Ethylbenzene	Inhalation	endocrine system	Not classified	Mouse	NOAEL 3.3 mg/l	103 weeks
Ethylbenzene	Inhalation	gastrointestinal tract	Not classified	Rat	NOAEL 3.3 mg/l	2 years
Ethylbenzene	Inhalation	bone, teeth, nails, and/or hair   muscles	Not classified	Multiple animal species	NOAEL 4.2 mg/l	90 days
Ethylbenzene	Inhalation	heart   immune system   respiratory system	Not classified	Multiple animal species	NOAEL 3.3 mg/l	2 years
Ethylbenzene	Ingestion	liver   kidney and/or bladder	Not classified	Rat	NOAEL 680 mg/kg/day	6 months
2,3-Epoxypropyl neodecanoate	Ingestion	hematopoietic system   liver	Not classified	Rat	NOAEL 400 mg/kg/day	5 weeks

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2,3-Epoxypropyl neodecanoate	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 40 mg/kg/day	5 weeks
Triphenyl Phosphite	Ingestion	nervous system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 15 mg/kg/day	28 days

**Aspiration Hazard**

Name	Value
Xylene	Aspiration hazard
Ethylbenzene	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information**

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

**12.1. Toxicity**

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Cyclohexanone	108-94-1	Water flea	Experimental	24 hours	EC50	800 mg/l
Cyclohexanone	108-94-1	Fathead minnow	Experimental	96 hours	LC50	527 mg/l
Cyclohexanone	108-94-1	Algae	Experimental	72 hours	EC50	32.9 mg/l
Cyclohexanone	108-94-1	Algae	Experimental	72 hours	Effect Concentration 10%	3.56 mg/l
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Fathead minnow	Experimental	96 hours	LC50	151 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	EC50	>1,000 mg/l
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Green algae	Experimental	72 hours	NOEC	>=1,000 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	EC50	>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	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
Vinyl polymer	Trade Secret		Data not available or insufficient for classification			
Alkyd resin 3261	Trade Secret		Data not available or insufficient for classification			



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2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with p-phenylenediamine and sodium methoxide	106276-80-6		Data not available or insufficient for classification			
Xylene	1330-20-7		Data not available or insufficient for classification			
2,4-Dihydroxybenzophenone	131-56-6	Copepods	Experimental	48 hours	LC50	2.6 mg/l
2,4-Dihydroxybenzophenone	131-56-6	Goldfish	Experimental	28 days	NOEC	0.48 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	Bluegill	Experimental	96 hours	LC50	4.4 mg/l
Bis(2,2,6,6-Tetramethyl-4-piperidyl) sebacate	52829-07-9	Water flea	Experimental	48 hours	EC50	8.6 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	Green Algae	Experimental	72 hours	Effect Concentration 10%	0.188 mg/l
Ethylbenzene	100-41-4	Green Algae	Experimental	96 hours	EC50	3.6 mg/l
Ethylbenzene	100-41-4	Mysid Shrimp	Experimental	96 hours	LC50	2.6 mg/l
Ethylbenzene	100-41-4	Water flea	Experimental	48 hours	EC50	1.8 mg/l
Ethylbenzene	100-41-4	Rainbow trout	Experimental	96 hours	LC50	4.2 mg/l
Ethylbenzene	100-41-4	Atlantic Silverside	Experimental	96 hours	LC50	5.1 mg/l
Ethylbenzene	100-41-4	Water flea	Experimental	7 days	NOEC	0.96 mg/l
2,3-Epoxypropyl neodecanoate	26761-45-5	Green Algae	Experimental	72 hours	EC50	2.9 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	Rainbow trout	Experimental	96 hours	LC50	5 mg/l
2,3-Epoxypropyl neodecanoate	26761-45-5	Green algae	Experimental	96 hours	NOEC	1 mg/l
Poly(oxy-1,2-ethanediyl), $\alpha$ -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- $\omega$ -hydroxy-	104810-48-2		Data not available or insufficient for classification			
Polymeric benzotriazole	104810-47-1		Data not available or insufficient for classification			
Calcium bis(2-ethylhexanoate)	136-51-6	Green algae	Estimated	72 hours	EC50	56 mg/l
Calcium bis(2-ethylhexanoate)	136-51-6	Water flea	Estimated	48 hours	EC50	97 mg/l
Calcium bis(2-ethylhexanoate)	136-51-6	Ricefish	Estimated	96 hours	LC50	>113 mg/l
Calcium bis(2-ethylhexanoate)	136-51-6	Water flea	Estimated	21 days	NOEC	28 mg/l

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Calcium bis(2-ethylhexanoate)	136-51-6	Green algae	Estimated	96 hours	Effect Concentration 10%	28 mg/l
Zinc bis(2-ethylhexanoate)	136-53-8	Rainbow trout	Experimental	96 hours	LC50	0.44 mg/l
Zinc bis(2-ethylhexanoate)	136-53-8	Water flea	Experimental	48 hours	EC50	1.6 mg/l
Triphenyl Phosphite	101-02-0	Water flea	Experimental	48 hours	EC50	0.45 mg/l
Triphenyl Phosphite	101-02-0	Ricefish	Experimental	96 hours	LC50	>4.3 mg/l
Triphenyl Phosphite	101-02-0	Green Algae	Experimental	72 hours	EC50	>16 mg/l
Triphenyl Phosphite	101-02-0	Green Algae	Experimental	72 hours	NOEC	16 mg/l

**12.2. Persistence and degradability**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Cyclohexanone	108-94-1	Experimental Biodegradation	14 days	BOD	87 % BOD/ThBOD	OECD 301C - MITI test (I)
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Experimental Biodegradation	28 days	BOD	67 % weight	Other methods
2-Methoxy-1-methylethyl acetate	108-65-6	Experimental Biodegradation	28 days	BOD	87.2 % BOD/ThBOD	OECD 301C - MITI test (I)
Vinyl polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Alkyd resin 3261	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with p-phenylenediamine and sodium methoxide	106276-80-6	Estimated Biodegradation	28 days	BOD	3 % weight	OECD 301C - MITI test (I)
Xylene	1330-20-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,4-Dihydroxybenzophenone	131-56-6	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)
Bis(2,2,6,6-Tetramethyl-4-piperidyl) sebacate	52829-07-9	Experimental Biodegradation	28 days	CO2 evolution	24 % weight	OECD 301B - Modified sturm or CO2
Ethylbenzene	100-41-4	Experimental Biodegradation	28 days	CO2 evolution	70-80 % weight	Other methods
Ethylbenzene	100-41-4	Experimental Photolysis		Photolytic half-life (in air)	4.26 days (t 1/2)	Other methods
2,3-Epoxypropyl neodecanoate	26761-45-5	Experimental Hydrolysis		Half-life (t 1/2)	9.9 days (t 1/2)	Other methods
2,3-Epoxypropyl neodecanoate	26761-45-5	Experimental Biodegradation	28 days	BOD	11.6 % weight	OECD 301F - Manometric respirometry
Poly(oxy-1,2-ethanediyl), $\alpha$ -[3-[3-(2H- benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- $\omega$ -hydroxy-	104810-48-2	Estimated Biodegradation	28 days	BOD	43 % weight	OECD 301F - Manometric respirometry
Polymeric benzotriazole	104810-47-1	Estimated Biodegradation	28 days	BOD	33 % weight	OECD 301F - Manometric respirometry
Calcium bis(2-ethylhexanoate)	136-51-6	Estimated Biodegradation	28 days	Dissolv. Organic Carbon Deplet	99 % weight	OECD 301E - Modified OECD Scre
Zinc bis(2-ethylhexanoate)	136-53-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Triphenyl Phosphite	101-02-0	Estimated Biodegradation	14 days	BOD	85 % BOD/ThBOD	OECD 301C - MITI test (I)
Triphenyl Phosphite	101-02-0	Experimental Hydrolysis		Hydrolytic half-life	0.5 hours (t 1/2)	Other methods

### 12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Cyclohexanone	108-94-1	Experimental Bioconcentration		Log Kow	0.86	Other methods
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	Experimental Bioconcentration		Log Kow	0.61	Other methods
2-Methoxy-1-methylethyl acetate	108-65-6	Experimental Bioconcentration		Log Kow	0.36	Other methods
Vinyl polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Alkyd resin 3261	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with p-phenylenediamine and sodium methoxide	106276-80-6	Estimated Bioconcentration		Bioaccumulation factor	35	Estimated: Bioconcentration factor
Xylene	1330-20-7	Experimental BCF - Rainbow Tr	56 days	Bioaccumulation factor	14	Other methods
2,4-Dihydroxybenzophenone	131-56-6	Estimated Bioconcentration		Bioaccumulation factor	4.6	Estimated: Bioconcentration factor
Bis(2,2,6,6-Tetramethyl-4-piperidyl) sebacate	52829-07-9	Experimental Bioconcentration		Log Kow	0.35	Other methods
Ethylbenzene	100-41-4	Experimental BCF - Other	42 days	Bioaccumulation factor	1	Other methods
2,3-Epoxypropyl neodecanoate	26761-45-5	Estimated Bioconcentration		Bioaccumulation factor	28	Estimated: Bioconcentration factor
Poly(oxy-1,2-ethanediyl), $\alpha$ -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- $\omega$ -hydroxy-	104810-48-2	Estimated Bioconcentration		Bioaccumulation factor	3.8	Estimated: Bioconcentration factor
Polymeric benzotriazole	104810-47-1	Estimated Bioconcentration		Bioaccumulation factor	7.4	Other methods
Calcium bis(2-ethylhexanoate)	136-51-6	Estimated Bioconcentration		Log Kow	2.64	Other methods
Zinc bis(2-ethylhexanoate)	136-53-8	Estimated Bioconcentration		Log Kow	2.7	Other methods
Triphenyl Phosphite	101-02-0	Estimated Bioconcentration		Bioaccumulation factor	13800	Estimated: Bioconcentration factor

### 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

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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

75-0300-8073-5

**ADR/RID:** UN1210, PRINTING INK, LIMITED QUANTITY, 3., III, (E), ADR Classification Code: F1.

**IMDG-CODE:** UN1210, PRINTING INK, 3, III, IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FE,SD.

**ICAO/IATA:** UN1210, PRINTING INK, 3., III.

## 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>
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
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

#### Global inventory status

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

### 15.2. Chemical Safety Assessment

## SECTION 16: Other information

#### List of relevant H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.

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.
H341	Suspected of causing genetic defects.
H361df	Suspected of damaging fertility. Suspected of damaging the unborn child.
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:**

Professional Use of Coatings: Section 16: Annex information was added.  
 Section 3: Composition/ Information of ingredients table information was modified.  
 Section 8: DNEL table row information was modified.  
 Section 8: PNEC table row information was modified.  
 Section 11: Target Organs - Repeated Table information was modified.  
 Section 12: Component ecotoxicity information information was modified.  
 Section 12: Persistence and Degradability information information was modified.  
 Section 15: Carcinogenicity information information was modified.  
 Section 15: Chemical Safety Assessment information was deleted.

**Annex**

<b>1. Title</b>	
<b>Substance identification</b>	Xylene; EC No. 215-535-7; CAS Nbr 1330-20-7;
<b>Exposure Scenario Name</b>	Commercial Screen Printing with UV Curable Coatings
<b>Lifecycle Stage</b>	Widespread use by professional workers
<b>Contributing activities</b>	PROC 08a -Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC 10 -Roller application or brushing ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
<b>Processes, tasks and activities covered</b>	Application of product with a roller or brush. Transfers without dedicated controls, including loading, filling, dumping, bagging.
<b>2. Operational conditions and risk management measures</b>	
<b>Operating Conditions</b>	<b>Physical state:</b> Liquid. <b>General operating conditions:</b> Assumes use at not more than 20°C above ambient temperature; Duration of use: 8 hours/day; Emission days per year: 365 days/year; Indoors with enhanced general ventilation;  <b>Task: Transferring Material;</b> Duration of use: 4 hours/day;
<b>Risk management measures</b>	Under the operational conditions described above the following risk management measures apply: <b>General risk management measures:</b> <b>Human health:</b> Half-facepiece air-purifying respirator;

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	<b>Environmental:</b> Municipal Sewage Treatment Plant;
<b>Waste management measures</b>	Do not apply industrial sludge to natural soils;
<b>3. Prediction of exposure</b>	
<b>Prediction of exposure</b>	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

<b>1. Title</b>	
<b>Substance identification</b>	2-Methoxy-1-methylethyl acetate; EC No. 203-603-9; CAS Nbr 108-65-6;
<b>Exposure Scenario Name</b>	Professional Use of Coatings
<b>Lifecycle Stage</b>	Widespread use by professional workers
<b>Contributing activities</b>	PROC 05 -Mixing or blending in batch processes PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC 10 -Roller application or brushing ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
<b>Processes, tasks and activities covered</b>	Application of product with a roller or brush. Mixing or blending of solid or liquid materials. Transfer of substance/mixture with dedicated engineering controls.
<b>2. Operational conditions and risk management measures</b>	
<b>Operating Conditions</b>	<b>Physical state:</b> Liquid. <b>General operating conditions:</b> Assumes use at not more than 20°C above ambient temperature; Duration of use: 8 hours/day;
<b>Risk management measures</b>	Under the operational conditions described above the following risk management measures apply: <b>General risk management measures:</b> <b>Human health:</b> None needed; <b>Environmental:</b> None needed;
<b>Waste management measures</b>	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:
<b>3. Prediction of exposure</b>	
<b>Prediction of exposure</b>	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

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

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