

# Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Safe Work Australia, December 2011)

## **SECTION 1: Identification**

#### 1.1. Product identifier

3M Process Colour 884I, Yellow

#### **Product Identification Numbers** 75-0301-1088-8

#### 1.2. Recommended use and restrictions on use

#### Recommended use

Professional printing ink for use in traffic safety systems.

For Industrial or Professional use only.

#### 1.3. Supplier's details

Address:	3M Australia - Building A, 1 Rivett Road, North Ryde NSW 2113
Telephone:	136 136
E Mail:	productinfo.au@mmm.com
Website:	www.3m.com.au

**1.4. Emergency telephone number** EMERGENCY: 1800 097 146 (Australia only)

### **SECTION 2: Hazard identification**

This product is classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011, in accordance with applicable State and Territory legislation.

Refer to Section 14 of this Safety Data Sheets for product Dangerous Goods Classification.

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

Flammable liquid: Category 3. Serious Eye Damage/Irritation: Category 1.

#### 2.2. Label elements

The label elements below were prepared in accordance with the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals (Safe Work Australia, December 2011). This information may be different from the actual product

label.

# Signal word

Danger

### Symbols Flame |Corrosion |

#### **Pictograms**



#### Hazard statements H226

H318

Flammable liquid and vapour. Causes serious eye damage.

**Precautionary statements** 

Prevention:	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
	No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P280A	Wear eye/face protection.
Response:	
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
1505 + 1551 + 1556	lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTRE or doctor/physician.
P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry
1570 - 1570	chemical or carbon dioxide to extinguish.
Storage:	
P403 + P235	Store in a well-ventilated place. Keep cool.
Disposal:	
P501	Dispose of contents/container in accordance with applicable
	local/regional/national/international regulations.

# 2.3. Other assigned/identified product hazards

None known.

### 2.4. Other hazards which do not result in classification

Causes mild skin irritation.

Toxic to aquatic life with long lasting effects.

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

This material is a mixture.

Ingredient	CAS Nbr	% by Weight
Propanol, 1(or 2)-(2-	88917-22-0	30 - 60
methoxymethylethoxy)-, acetate		
2-Propenoic acid, 2-methyl-, polymer with	28262-63-7	10 - 30
butyl 2-methyl-2-propenoate and methyl 2-		
methyl-2-propenoate		
Acrylic polymers	Trade Secret	10 - 30
1-Methoxy-2-propyl acetate	108-65-6	5 - 10
Cyclohexanone	108-94-1	5 - 10
Benzoic acid, 2,3,4,5-tetrachloro-6-	106276-80-6	1 - 5
cyano-, methyl ester. reaction products with		
p-phenylenediamine and sodium methoxide		
Vinyl polymer	Trade Secret	1 - 5
3-Dodecyl-1-(2,2,6,6-tetramethyl-4-	79720-19-7	0.1 - < 1
piperidinyl) -2,5-pyrrolidinedione		
n-Butyl methacrylate	97-88-1	< 0.3
2,3-Epoxypropyl neodecanoate	26761-45-5	< 0.2
Ethylbenzene	100-41-4	< 0.2
Toluene	108-88-3	< 0.2
Nickel salts of naphthenic acids	61788-71-4	< 0.03

# **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

Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision).

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

Not applicable

# **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable 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.
Hydrogen Fluoride	During combustion.
Oxides of nitrogen.	During combustion.

#### 5.3. Special protective actions 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.

#### Hazchem Code: •3Y

### **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 vapors, 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 in accordance with applicable local/regional/national/international regulations.

## **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.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### **Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Ethylbenzene	100-41-4	ACGIH	TWA:20 ppm	A3: Confirmed animal
				carcinogen.
Ethylbenzene	100-41-4	Australia OELs	TWA(8 hours):434	
			mg/m3(100 ppm);STEL(15	
			minutes):543 mg/m3(125 ppm)	
1-Methoxy-2-propyl acetate	108-65-6	AIHA	TWA:50 ppm	
1-Methoxy-2-propyl acetate	108-65-6	Australia OELs	TWA(8 hours):274 mg/m3(50	SKIN
			ppm);STEL(15 minutes):548	
			mg/m3(100 ppm)	
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human
				carcinogen, Ototoxicant
Toluene	108-88-3	Australia OELs	TWA(8 hours):191 mg/m3(50	SKIN
			ppm);STEL(15 minutes):574	
			mg/m3(150 ppm)	
Cyclohexanone	108-94-1	ACGIH	TWA:20 ppm;STEL:50 ppm	A3: Confirmed animal
				carcinogen. Danger of
				cutaneous absorption.
Cyclohexanone	108-94-1	Australia OELs	TWA(8 hours):100 mg/m3(25	SKIN
			ppm)	
Nickel, soluble compounds, as	61788-71-4	Australia OELs	TWA(as Ni)(8 hours): 0.1	
Ni.			mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

Australia OELs : Australia. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment

CMRG : Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

Sen: Sensitiser

Sk: Absorption through the skin may be a significant source of exposure.

#### 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.

Select and use eye protection in accordance with AS/NZS 1336. Eye protection should comply with the performance specifications of AS/NZS 1337.

#### 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: Polymer laminate

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

Select and use gloves according to AS/NZ 2161.

#### **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. Select and use respirators according to AS/NZS 1715. Respirators should comply with AS/NZS 1716 performance specifications. For information about respirators, call 3M on 1800 024 464.

# **SECTION 9: Physical and chemical properties**

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

Physical state	Liquid.	
Specific Physical Form:	Liquid.	
Colour	Yellow	
Odour	Sweet Ether	
Odour threshold	No data available.	
рН	Not applicable.	
Melting point/Freezing point	Not applicable.	
Boiling point/Initial boiling point/Boiling range	>=140 °C	
Flash point	42.2 °C [Test Method: Tagliabue closed cup]	
Evaporation rate	<=0.4 [ <i>Ref Std</i> :BUOAC=1]	
Flammability (solid, gas)	Not applicable.	
Flammable Limits(LEL)	1.1 % volume	
Flammable Limits(UEL)	8.6 % volume	
Vapour pressure	<=493.3 Pa [@ 20 °C ]	
Vapor Density and/or Relative Vapor Density	No data available.	
Density	0.95 g/ml	
Relative density	0.95 [ <i>Ref Std</i> :WATER=1]	
Water solubility	No data available.	

Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity/Kinematic Viscosity	1,000 - 1,200 mPa-s [Details:DTM-300 (#3 @ 30 rpm)]
Volatile organic compounds (VOC)	600 - 800 g/l [ <i>Details</i> : As Packaged]
Percent volatile	65 - 75 %
VOC less H2O & exempt solvents	No data available.
Molecular weight	Not applicable.

# **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. Conditions to avoid

Sparks and/or flames.

### 10.4. Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### **10.5 Incompatible materials**

Strong acids. Strong oxidising agents.

#### **10.6 Hazardous decomposition products**

Condition

Substance None known.

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

# **SECTION 11: Toxicological information**

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

**11.1 Information on Toxicological effects** 

Signs and Symptoms of Exposure

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

### Inhalation

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

### Skin contact

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

#### Eye contact

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

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

### **Additional Health Effects:**

#### **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 ATE >5,000 mg/kg
Overall product	Inhalation-Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 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-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate	Dermal		LD50 estimated to be > 5,000 mg/kg
2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
1-Methoxy-2-propyl acetate	Dermal	Rabbit	LD50 > 5,000 mg/kg
1-Methoxy-2-propyl acetate	Inhalation-Vapour (4 hours)	Rat	LC50 > 28.8 mg/l
1-Methoxy-2-propyl acetate	Ingestion	Rat	LD50 8,532 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
Benzoic acid, 2,3,4,5-tetrachloro-6- cyano-,methyl ester. reaction products with p-phenylenediamine and sodium methoxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Benzoic acid, 2,3,4,5-tetrachloro-6- cyano-,methyl ester. reaction products with p-phenylenediamine	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1 mg/l

and sodium methoxide			
Benzoic acid, 2,3,4,5-tetrachloro-6- cyano-,methyl ester. reaction products with p-phenylenediamine and sodium methoxide	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
3-Dodecyl-1-(2,2,6,6-tetramethyl-4- piperidinyl) -2,5-pyrrolidinedione	Dermal	Rabbit	LD50 > 2,000 mg/kg
3-Dodecyl-1-(2,2,6,6-tetramethyl-4- piperidinyl) -2,5-pyrrolidinedione	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5 mg/l
3-Dodecyl-1-(2,2,6,6-tetramethyl-4- piperidinyl) -2,5-pyrrolidinedione	Ingestion	Rat	LD50 > 2,000 mg/kg
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
n-Butyl methacrylate	Dermal	Rabbit	LD50 > 2,000 mg/kg
n-Butyl methacrylate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 27 mg/l
n-Butyl methacrylate	Ingestion	Rat	LD50 > 2,000 mg/kg
2,3-Epoxypropyl neodecanoate	Dermal	Rat	LD50 > 2,000 mg/kg
2,3-Epoxypropyl neodecanoate	Ingestion	Rat	LD50 > 2,000 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-Vapour (4 hours)	Rat	LC50 30 mg/l
Toluene	Ingestion	Rat	LD50 5,550 mg/kg
Nickel salts of naphthenic acids	Ingestion	Rat	LD50 419 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Rabbit	No significant irritation
1-Methoxy-2-propyl acetate	Rabbit	No significant irritation
Cyclohexanone	Rabbit	Irritant
Benzoic acid, 2,3,4,5-tetrachloro-6-cyano-,methyl ester. reaction products with p-phenylenediamine and sodium methoxide	Rabbit	No significant irritation
Vinyl polymer	Professional judgement	No significant irritation
3-Dodecyl-1-(2,2,6,6-tetramethyl-4-piperidinyl) - 2,5-pyrrolidinedione	Rabbit	Corrosive
Ethylbenzene	Rabbit	Mild irritant
n-Butyl methacrylate	Rabbit	Irritant
2,3-Epoxypropyl neodecanoate	Rabbit	No significant irritation
Toluene	Rabbit	Irritant
Nickel salts of naphthenic acids	Professional judgement	Minimal irritation

### Serious Eye Damage/Irritation

Name	Species	Value
Propanol, 1(or 2)-(2-methoxymethylethoxy)-,	Rabbit	No significant irritation
acetate		
1-Methoxy-2-propyl acetate	Rabbit	Mild irritant
Cyclohexanone	In vitro data	Corrosive
Benzoic acid, 2,3,4,5-tetrachloro-6-cyano-,methyl	Rabbit	No significant irritation
ester. reaction products with p-phenylenediamine		

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and sodium methoxide		
Vinyl polymer	Professional judgement	No significant irritation
3-Dodecyl-1-(2,2,6,6-tetramethyl-4-piperidinyl) -	Rabbit	Corrosive
2,5-pyrrolidinedione		
Ethylbenzene	Rabbit	Moderate irritant
n-Butyl methacrylate	Rabbit	Mild irritant
2,3-Epoxypropyl neodecanoate	Rabbit	No significant irritation
Toluene	Rabbit	Moderate irritant
Nickel salts of naphthenic acids	Professional judgement	Mild irritant

### **Skin Sensitisation**

Name	Species	Value
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	Guinea pig	Not classified
1-Methoxy-2-propyl acetate	Guinea pig	Not classified
Cyclohexanone	Guinea pig	Not classified
Benzoic acid, 2,3,4,5-tetrachloro-6-cyano-,methyl ester. reaction products with p-phenylenediamine and sodium methoxide	Human	Not classified
Ethylbenzene	Human	Not classified
n-Butyl methacrylate	Guinea pig	Sensitising
2,3-Epoxypropyl neodecanoate	Guinea pig	Sensitising
Toluene	Guinea pig	Not classified
Nickel salts of naphthenic acids	similar compounds	Sensitising

#### **Respiratory Sensitisation**

Name	Species	Value
Nickel salts of naphthenic acids	Professional judgement	Sensitising

### Germ Cell Mutagenicity

Name	Route	Value
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	In Vitro	Not mutagenic
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	In vivo	Not mutagenic
1-Methoxy-2-propyl acetate	In Vitro	Not mutagenic
Cyclohexanone	In vivo	Not mutagenic
Cyclohexanone	In Vitro	Some positive data exist, but the data are not sufficient for classification
Benzoic acid, 2,3,4,5-tetrachloro-6-cyano-,methyl ester. reaction products with p-phenylenediamine and sodium methoxide	In Vitro	Not mutagenic
3-Dodecyl-1-(2,2,6,6-tetramethyl-4-piperidinyl) - 2,5-pyrrolidinedione	In Vitro	Not mutagenic
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
n-Butyl methacrylate	In Vitro	Not mutagenic
n-Butyl methacrylate	In vivo	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
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Nickel salts of naphthenic acids	In Vitro	Some positive data exist, but the data are not

		sufficient for classification
Nickel salts of naphthenic acids	In vivo	Mutagenic

### Carcinogenicity

Name	Route	Species	Value
Cyclohexanone	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic.
Toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Nickel salts of naphthenic acids	Inhalation	similar compounds	Carcinogenic.

# **Reproductive Toxicity**

### **Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	<b>Exposure Duration</b>
1-Methoxy-2-propyl	Ingestion	Not classified for	Rat	NOAEL	premating & during
acetate		female reproduction		1,000	gestation
				mg/kg/day	
1-Methoxy-2-propyl	Ingestion	Not classified for	Rat	NOAEL	premating & during
acetate		male reproduction		1,000	gestation
		_		mg/kg/day	
1-Methoxy-2-propyl	Ingestion	Not classified for	Rat	NOAEL	premating & during
acetate		development		1,000	gestation
		-		mg/kg/day	-
1-Methoxy-2-propyl	Inhalation	Not classified for	Rat	NOAEL 21.6	during
acetate		development		mg/l	organogenesis
Cyclohexanone	Inhalation	Not classified for	Rat	NOAEL 4	2 generation
		female reproduction		mg/l	· ·
Cyclohexanone	Inhalation	Not classified for	Rat	NOAEL 2	2 generation
5		male reproduction		mg/l	U
Cyclohexanone	Ingestion	Not classified for	Mouse	LOAEL	during
- ,	0	development		1,100	organogenesis
				mg/kg/day	
Cyclohexanone	Inhalation	Not classified for	Rat	NOAEL 2	2 generation
5		development		mg/l	U
Ethylbenzene	Inhalation	Not classified for	Rat	NOAEL 4.3	premating & during
5		development		mg/l	gestation
n-Butyl methacrylate	Ingestion	Not classified for	Rat	NOAEL	44 days
5	U	male reproduction		1,000	5
		1		mg/kg/day	
n-Butyl methacrylate	Ingestion	Not classified for	Rat	NOAEL 300	premating & during
	0	female reproduction		mg/kg/day	gestation
n-Butyl methacrylate	Ingestion	Not classified for	Rabbit	NOAEL 300	during gestation
	0	development		mg/kg/day	0.0
n-Butyl methacrylate	Inhalation	Not classified for	Rat	NOAEL 1.8	during gestation
		development		mg/l	
Toluene	Inhalation	Not classified for	Human	NOAEL Not	occupational
		female reproduction		available	exposure
Toluene	Inhalation	Not classified for	Rat	NOAEL 2.3	1 generation
	munution	male reproduction	1.41	mg/l	- Seneration
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520	during gestation
1 of delite	ingestion	Toxic to development	1.41	mg/kg/day	aaring gestution
Toluene	Inhalation	Toxic to development	Human	NOAEL Not	poisoning and/or
1 Oracile	matation	Toxic to development	manan	NOTEL NOT	poisoning and/of

				available	abuse
Nickel salts of	Ingestion	Toxic to development	similar compounds	NOAEL not	2 generation
naphthenic acids				available	

# Target Organ(s)

# Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
1-Methoxy-2- propyl acetate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
1-Methoxy-2- propyl acetate	Ingestion	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL not available	
Cyclohexanon e	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Guinea pig	LOAEL 16.1 mg/l	6 hours
Cyclohexanon e	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Cyclohexanon e	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
3-Dodecyl-1- (2,2,6,6- tetramethyl-4- piperidinyl) - 2,5- pyrrolidinedio ne	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	
Ethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Ethylbenzene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
n-Butyl methacrylate	Inhalation	respiratory irritation	May cause respiratory irritation		NOAEL Not available	
Toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Toluene	Inhalation	immune system	Not classified	Mouse	NOAEL 0.004 mg/l	3 hours
Toluene	Ingestion	central nervous system	May cause drowsiness or	Human	NOAEL Not available	poisoning and/or abuse

	depression	dizziness		

#### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Propanol, 1(or 2)-(2- methoxymeth ylethoxy)-, acetate	Ingestion	liver   heart   endocrine system   hematopoietic system   kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	4 weeks
1-Methoxy-2- propyl acetate	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 16.2 mg/l	9 days
1-Methoxy-2- propyl acetate	Inhalation	olfactory system	Not classified	Mouse	LOAEL 1.62 mg/l	9 days
1-Methoxy-2- propyl acetate	Inhalation	blood	Not classified	Multiple animal species	NOAEL 16.2 mg/l	9 days
1-Methoxy-2- propyl acetate	Ingestion	endocrine system	Not classified	Rat	NOAEL 1,000 mg/kg/day	44 days
Cyclohexanon e	Inhalation	liver   kidney and/or bladder	Not classified	Rabbit	NOAEL 0.76 mg/l	50 days
Cyclohexanon e	Ingestion	liver	Not classified	Mouse	NOAEL 4,800 mg/kg/day	90 days
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
	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
n-Butyl methacrylate	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 11 mg/l	28 days
n-Butyl methacrylate	Inhalation	olfactory system	Not classified	Rat	NOAEL 1.8 mg/l	28 days
n-Butyl methacrylate	Inhalation	heart   endocrine system   hematopoietic system   liver   nervous system   respiratory	Not classified	Rat	NOAEL 11 mg/l	28 days

		system				
n-Butyl	Ingestion	olfactory system	Not classified	Rat	NOAEL 60	90 days
methacrylate					mg/kg/day	
n-Butyl methacrylate	Ingestion	endocrine system   hematopoietic system   liver   nervous system   kidney and/or bladder   heart   immune system	Not classified	Rat	NOAEL 360 mg/kg/day	90 days
2,3-	Ingestion	hematopoietic	Not classified	Rat	NOAEL 400	5 weeks
Epoxypropyl neodecanoate		system   liver			mg/kg/day	
2,3- Epoxypropyl neodecanoate	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 40 mg/kg/day	5 weeks
Toluene	Inhalation	auditory system   eyes   olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	nervous system	May cause damage to organs though prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
Toluene	Inhalation	heart   liver   kidney and/or bladder	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	endocrine system	Not classified	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system   vascular system	Not classified	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	gastrointestinal tract	Not classified	Multiple animal species	NOAEL 11.3 mg/l	15 weeks
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
Toluene	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	liver   kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Not classified	Mouse	NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	Not classified	Mouse	NOAEL 105 mg/kg/day	28 days
Toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105 mg/kg/day	4 weeks
Nickel salts of	Inhalation	respiratory	Causes damage to	similar	NOAEL not	13 weeks

naphthenic acids	system	organs through prolonged or	compounds	available	
		repeated exposure			

#### **Aspiration Hazard**

Name	Value
Ethylbenzene	Aspiration hazard
Toluene	Aspiration hazard

#### Exposure Levels

Refer Section 8.1 Control Parameters of this Safety Data Sheet.

#### **Interactive Effects**

Not determined.

# **SECTION 12: Ecological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

#### Acute aquatic hazard:

GHS Acute 2: Toxic to aquatic life.

#### Chronic aquatic hazard:

GHS Chronic 2: Toxic to aquatic life with long lasting effects.

No product test data available.

Material	CAS Number	Organism	Туре	Exposure	Test endpoint	Test result
2)-(2-	88917-22-0	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
methoxymethyl ethoxy)-, acetate						
Propanol, 1(or 2)-(2- methoxymethyl ethoxy)-, acetate	88917-22-0	Green algae	Experimental	72 hours	EC50	>1,000 mg/l
Propanol, 1(or 2)-(2- methoxymethyl ethoxy)-, acetate	88917-22-0	Rainbow trout	Experimental	96 hours	LC50	111 mg/l
Propanol, 1(or 2)-(2- methoxymethyl ethoxy)-, acetate	88917-22-0	Water flea	Experimental	48 hours	LC50	1,090 mg/l
Propanol, 1(or	88917-22-0	Green algae	Experimental	72 hours	NOEC	1,000 mg/l

]	Data not			N/A
	available or			
i	insufficient for			
	classification			
ctivated	Experimental	30 minutes	EC10	>1,000 mg/l
	p ••		2010	1,000 <b>9</b> ,1
	Experimental	72 hours	EC50	>1,000 mg/l
	Experimental	/2 110013	LCJU	> 1,000 mg/1
inhow trout	Exporimontal	06 hours	1.050	134 mg/l
lindow trout	Experimental	90 nours	LC30	134 mg/1
- + Cl	<b>F</b>	40.1	E050	270
ater flea	Experimental	48 nours	EC30	370 mg/l
1	<b>D</b>	<b>70</b> 1	NOFG	1.000 //
een algae	Experimental	72 hours	NOEC	1,000 mg/l
ater flea	Experimental	21 days	NOEC	100 mg/l
	Experimental	30 minutes	EC50	>1,000 mg/l
ıdge				
gae or other	Experimental	72 hours	EC50	32.9 mg/l
uatic plants				_
thead	Experimental	96 hours	LC50	527 mg/l
	1			C
	Experimental	24 hours	EC50	800 mg/l
				3.56 mg/l
	p ••	, <b>_</b> nouro	2010	0.000 mg/1
	Estimated	30 minutes	EC50	>1,000 mg/l
	Listimated	50 minutes	LCJU	> 1,000 mg/1
luge				
11	Data nat			NT / A
				N/A
•	classification			
	Data not available or			N/A
	etivated idge reen algae inbow trout ater flea reen algae ater flea reen algae ater flea gae or other uatic plants thead nnow ater flea gae or other uatic plants tivated idge gae or other uatic plants tivated idge	hdgeIreen algaeExperimentalinbow troutExperimentalater fleaExperimentalreen algaeExperimentalater fleaExperimentalater fleaExperimentalater fleaExperimentalctivatedExperimentaluatic plantsExperimentalater fleaExperimentalater fleaExperimentalater fleaExperimentaluatic plantsExperimentalgae or otherExperimentalgae or otherExperimentaluatic plantsExperimentalctivatedEstimated	available or insufficient for classificationavailable or insufficient for classificationctivated idgeExperimental Experimental30 minutesreen algaeExperimental Experimental72 hoursater fleaExperimental Experimental96 hoursater fleaExperimental Experimental72 hoursater fleaExperimental Experimental72 hoursater fleaExperimental Experimental30 minutesater fleaExperimental Experimental30 minutesater fleaExperimental Experimental72 hoursater fleaExperimental Experimental72 hoursater fleaExperimental Experimental72 hoursater fleaExperimental Experimental96 hoursnnowExperimental Experimental72 hoursater fleaExperimental Experimental30 minutesgae or other uatic plantsEstimated Stivated30 minutesctivated idgeEstimated Stivated30 minutes	available or insufficient for classification30 minutesEC10stivated idgeExperimental30 minutesEC10een algaeExperimental72 hoursEC50ater fleaExperimental96 hoursLC50ater fleaExperimental72 hoursNOECater fleaExperimental21 daysNOECater fleaExperimental30 minutesEC50ater fleaExperimental21 daysNOECater fleaExperimental30 minutesEC50gae or other uatic plantsExperimental72 hoursEC50gae or other uatic plantsExperimental96 hoursLC50tivated udgeExperimental72 hoursEC50gae or other uatic plantsExperimental24 hoursEC50stivated udgeEstimated30 minutesEC50ater fleaExperimental72 hoursEC10ater fleaExperimental24 hoursEC50gae or other uatic plantsEstimated30 minutesEC50ater fleaExperimental72 hoursEC10ater fleaExperimental24 hoursEC50gae or other uatic plantsEstimated30 minutesEC50ater fleaEstimated30 minutesEC50ater fleaEstimated30 minutesEC50ater fleaEstimated30 minutesEC50ater fleaEstimatedSo minutesEC50ater flea

			insufficient for			
			classification			
3-Dodecyl-1-	79720-19-7	Common Carp	Experimental	96 hours	LC50	0.097 mg/l
(2,2,6,6-		1	1			C C
tetramethyl-4-						
piperidinyl) -						
2,5-						
pyrrolidinedion						
e						
n-Butyl	97-88-1	Bacteria	Experimental	18 hours	EC50	>254 mg/l
methacrylate						
n-Butyl	97-88-1	Green algae	Experimental	72 hours	EC50	31.2 mg/l
methacrylate	07.00.1	N 11		0.6.1	1.050	
n-Butyl	97-88-1	Medaka	Experimental	96 hours	LC50	5.6 mg/l
methacrylate	07.00.1	Weter Cler	<b>F</b>	40.1	E 050	25
n-Butyl	97-88-1	Water flea	Experimental	48 hours	EC50	25 mg/l
methacrylate n-Butyl	97-88-1	Green algae	Experimental	72 hours	NOEC	24.8 mg/l
methacrylate	97-00-1	Green algae	Experimental	72 nours	NOEC	24.8 mg/1
n-Butyl	97-88-1	Water flea	Experimental	21 days	NOEC	1.1 mg/l
methacrylate	97-00-1	water nea	Experimental	21 days	NOLC	1.1 mg/1
2,3-	26761-45-5	Activated	Experimental	3 hours	NOEC	500 mg/l
Epoxypropyl	20701-43-3	sludge	Experimental	5 110015	NOLC	500 mg/1
neodecanoate		Siddge				
2,3-	26761-45-5	Green algae	Experimental	72 hours	ErC50	2.9 mg/l
Epoxypropyl	20,01 10 0		Enperimental	/2 nouis	Licov	2.9 mg/1
neodecanoate						
2,3-	26761-45-5	Rainbow trout	Experimental	96 hours	LC50	5 mg/l
Epoxypropyl			1			e
neodecanoate						
2,3-	26761-45-5	Water flea	Experimental	48 hours	EC50	4.8 mg/l
Epoxypropyl						
neodecanoate						
2,3-	26761-45-5	Green algae	Experimental	96 hours	NOEC	1 mg/l
Epoxypropyl						
neodecanoate			-			
Ethylbenzene	100-41-4	Green algae	Estimated	73 hours	EC50	4.36 mg/l
Ethylbenzene	100-41-4		Estimated	96 hours	LC50	2.6 mg/l
Ethylbenzene	100-41-4	Water flea	Estimated	48 hours	EC50	3.82 mg/l
Ethylbenzene	100-41-4	Activated	Experimental	49 hours	EC50	130 mg/l
E4 11	100 41 4	sludge		72.1	NOTO	0.44 /1
Ethylbenzene	100-41-4	Green algae	Estimated	73 hours	NOEC	0.44 mg/l
Ethylbenzene	100-41-4	Rainbow trout	Estimated	56 days	NOEC	>1.3 mg/l
Ethylbenzene	100-41-4	Water flea	Estimated	7 days	NOEC	0.96 mg/l
Toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
Toluene	108-88-3	Grass Shrimp	Experimental	96 hours	LC50	9.5 mg/l
Toluene	108-88-3	Green algae	Experimental	72 hours	EC50	12.5 mg/l
Toluene	108-88-3	Leopard frog	Experimental	9 days	LC50	0.39 mg/l
Toluene	108-88-3	Pink Salmon	Experimental	96 hours	LC50	6.41 mg/l
Toluene	108-88-3	Water flea	Experimental	48 hours	EC50	3.78 mg/l
Toluene	108-88-3	Coho Salmon	Experimental	40 days	NOEC	1.39 mg/l
Toluene	108-88-3	Diatom	Experimental	72 hours	NOEC	10 mg/l
Toluene	108-88-3	Water flea	Experimental	7 days	NOEC	0.74 mg/l
Toluene	108-88-3	Activated	Experimental	12 hours	IC50	292 mg/l

		sludge				
Toluene	108-88-3	Bacteria	Experimental	16 hours	NOEC	29 mg/l
Toluene	108-88-3	Bacteria	Experimental	24 hours	EC50	84 mg/l
Toluene	108-88-3	Redworm	Experimental	28 days	LC50	>150 mg per kg of bodyweight
Toluene	108-88-3	Soil microbes	Experimental	28 days	NOEC	<26 mg/kg (Dry Weight)
Nickel salts of naphthenic acids	61788-71-4	Common Carp	Estimated	96 hours	LC50	6.9 mg/l
Nickel salts of naphthenic acids	61788-71-4	Green algae	Estimated	96 hours	EC50	0.034 mg/l
Nickel salts of naphthenic acids	61788-71-4	Water flea	Estimated	48 hours	EC50	0.069 mg/l

### 12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Propanol, 1(or	88917-22-0	Estimated	28 days	Dissolv.	90 %removal	OECD 301F -
2)-(2-		Biodegradation		Organic	of DOC	Manometric
methoxymethyl				Carbon Deplet		respirometry
ethoxy)-,						
acetate						
2-Propenoic	28262-63-7	Data not	N/A	N/A	N/A	N/A
acid, 2-methyl-,		available-				
polymer with		insufficient				
butyl 2-methyl-						
2-propenoate						
and methyl 2-						
methyl-2-						
propenoate						
1-Methoxy-2-	108-65-6	Experimental	28 days	BOD		OECD 301C - MITI
propyl acetate		Biodegradation			OD	test (I)
Cyclohexanone	108-94-1	Experimental	14 days	BOD		OECD 301C - MITI
		Biodegradation			D	test (I)
Benzoic acid,	106276-80-6	Estimated	28 days	BOD	3 %BOD/ThO	OECD 301C - MITI
2,3,4,5-		Biodegradation			D	test (I)
tetrachloro-6-						
cyano-,methyl						
ester. reaction						
products with						
p-						
phenylenediam						
ine and sodium						
methoxide			2.7.1.			2.7/4
Vinyl polymer	Trade Secret	Data not	N/A	N/A	N/A	N/A
		available-				
		insufficient	• • •			
3-Dodecyl-1-	79720-19-7	Experimental	28 days	CO2 evolution	0 %CO2	OECD 301B - Modified
(2,2,6,6-		Biodegradation			evolution/THC	sturm or CO2
tetramethyl-4-					O2 evolution	
piperidinyl) -						
2,5-						

pyrrolidinedion e						
n-Butyl methacrylate	97-88-1	Experimental Biodegradation	28 days	BOD	88 %BOD/ThO D	OECD 301C - MITI test (I)
2,3- Epoxypropyl neodecanoate	26761-45-5	Experimental Biodegradation	28 days	BOD	11.6 %BOD/Th OD	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
Ethylbenzene	100-41-4	Experimental Biodegradation	28 days	BOD	90- 98 %BOD/ThO D	OECD 301F - Manometric respirometry
Toluene	108-88-3	Experimental Biodegradation	20 days	BOD	80 %BOD/ThO D	APHA Std Meth Water/Wastewater
Toluene	108-88-3	Experimental Photolysis		Photolytic half- life (in air)	5.2 days (t 1/2)	
Nickel salts of naphthenic acids	61788-71-4	Data not available- insufficient	N/A	N/A	N/A	N/A

# 12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Propanol, 1(or 2)-(2- methoxymethyl ethoxy)-, acetate	88917-22-0	Experimental Bioconcentrati on		Log Kow	0.61	
2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl- 2-propenoate and methyl 2- methyl-2- propenoate	28262-63-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1-Methoxy-2- propyl acetate	108-65-6	Experimental Bioconcentrati on		Log Kow	0.36	
Cyclohexanone	108-94-1	Experimental Bioconcentrati on		Log Kow	0.86	
Benzoic acid, 2,3,4,5- tetrachloro-6- cyano-,methyl ester. reaction products with p- phenylenediam ine and sodium methoxide	106276-80-6	Estimated Bioconcentrati on		Bioaccumulatio n factor	35	
Vinyl polymer	Trade Secret	Data not available or	N/A	N/A	N/A	N/A

		insufficient for classification				
3-Dodecyl-1- (2,2,6,6- tetramethyl-4- piperidinyl) - 2,5- pyrrolidinedion e	79720-19-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
n-Butyl methacrylate	97-88-1	Experimental Bioconcentrati on		Log Kow	2.88	
2,3- Epoxypropyl neodecanoate	26761-45-5	Modeled Bioconcentrati on		Bioaccumulatio n factor	28	Catalogic™
Ethylbenzene	100-41-4	Experimental BCF - Fish	56 days	Bioaccumulatio n factor	25.9	
Toluene	108-88-3	Experimental BCF - Other	72 hours	Bioaccumulatio n factor	90	
Toluene	108-88-3	Experimental Bioconcentrati on		Log Kow	2.73	
Nickel salts of naphthenic acids	61788-71-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

#### 12.4. Mobility in soil

Please contact manufacturer for more details

#### 12.5 Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Disposal 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.

# **SECTION 14: Transport Information**

Australian Dangerous Goods Code (ADG) - Road/Rail Transport UN No.: UN1210 Proper shipping name: PRINTING INK Class/Division: 3 Sub Risk: Not applicable. Packing Group: III Special Instructions: Limited quantity may apply Hazchem Code: •3Y IERG: 16 International Air Transport Association (IATA) - Air Transport UN No.: UN1210 Proper shipping name: PRINTING INK Class/Division: 3 Sub Risk: Not applicable. Packing Group: III

International Maritime Dangerous Goods Code (IMDG)- Marine Transport UN No.: UN1210 Proper shipping name: PRINTING INK Class/Division: 3 Sub Risk: Not applicable. Packing Group: III Marine Pollutant: Not applicable. Special Instructions: Limited quantity may apply

### **SECTION 15: Regulatory information**

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

#### Australian Inventory Status:

All components of this product are listed on or exempt from the Australian Inventory of Industrial Chemicals (AIIC). Conditions may apply prior to introduction for direct importers of this product, Please contact 3M Australia on 136 136 for further details.

**Poison Schedule:** This product is intended for Industrial or Professional Use only and therefore is not packaged and labelled in accordance with the requirements of the Standard for the Uniform Scheduling of Medicines and Poisons.

## **SECTION 16: Other information**

#### **Revision information:**

Complete document review.

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 Safety 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.

Greenguard ® is a United States based program. The 'Low VOC' reference related to United States Federal and State regulations exemptions for some solvents.

#### 3M Australia SDSs are available at www.3m.com.au