Safety Data Sheet

Document Group:	20-3048-4	**Version Number:**	5.02
Revision Date:	20/06/2025	**Supercedes Date:**	27/05/2025
Transportation version number:			

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

1.1. Product identifier

3M™ Process Color 882N Traffic Sign Red

Product Identification Numbers

75-0301-3625-5

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 Israel, 91 Medinat Ha'Yehudim Street, Herzeliya 46120
Telephone: 09-961 5000
E Mail: innovation.il@mmm.com
Website: www.3M.com/il

1.4. Emergency telephone number

09-961 5000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.
The aspiration hazard classification is not required due to the product's viscosity.

CLASSIFICATION:

Flammable Liquid, Category 3 - Flam. Liq. 3; H226
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318
Skin Sensitization, Category 1 - Skin Sens. 1; H317
Carcinogenicity, Category 1A - Carc. 1A; H350

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

2.2. Label elements
CLP REGULATION (EC) No 1272/2008

SIGNAL WORD
Danger

Symbols:
GHS02 (Flame) |GHS05 (Corrosion) |GHS07 (Exclamation mark) |GHS08 (Health Hazard) |GHS09 (Environment) |

Pictograms

Ingredients:

Ingredient	C.A.S. No.	EC No.	% by Wt
Hydrocarbons, C10 aromatics, <1% naphthalene		918-811-1	15 - 40
Cyclohexanone	108-94-1	203-631-1	3 - 7
D-LIMONENE	5989-27-5	227-813-5	< 0.5
N-Butyl Methacrylate	97-88-1	202-615-1	< 0.3
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	247-979-2	< 0.2
Naphthenic Acid	1338-24-5	215-662-8	< 0.2
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	263-000-1	< 0.2

HAZARD STATEMENTS:

H226	Flammable liquid and vapor.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H350	May cause cancer.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261A	Avoid breathing vapors.
P280I	Wear protective gloves, eye protection, face protection, and respiratory protection.

Response:

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

SUPPLEMENTAL INFORMATION:

Supplemental Precautionary Statements:
Restricted to professional users.

19% of the mixture consists of components of unknown acute oral toxicity.
19% of the mixture consists of components of unknown acute dermal toxicity.
31% of the mixture consists of components of unknown acute inhalation toxicity.
Contains 19% of components with unknown hazards to the aquatic environment.

Nota P applied.

2.3. Other hazards

None known
This material does not contain any substances that are assessed to be a PBT or vPvB

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C10 aromatics, <1% naphthalene	(EC-No.) 918-811-1	15 - 40	Asp. Tox. 1, H304 STOT SE 3, H336 EUH066 Aquatic Chronic 2, H411
Acrylic polymers	Trade Secret	10 - 30	Substance not classified as hazardous
2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate	(CAS-No.) 28262-63-7	10 - 30	Substance not classified as hazardous
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	(EC-No.) 701-188-3	5 - 15	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Cyclohexanone	(CAS-No.) 108-94-1 (EC-No.) 203-631-1	3 - 7	Flam. Liq. 3, H226 Acute Tox. 4, H332 Acute Tox. 4, H312 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
1-methoxy-2-propyl acetate	(CAS-No.) 108-65-6 (EC-No.) 203-603-9	3 - 7	Flam. Liq. 3, H226 STOT SE 3, H336
Vinyl polymer	Trade Secret	1 - 5	Substance not classified as hazardous
Organic pigment 1	(CAS-No.) 5521-31-3	0.5 - 5	STOT RE 2, H373

	(EC-No.) 226-866-1		
Light aromatic solvent naphtha (petroleum)	(CAS-No.) 64742-95-6 (EC-No.) 265-199-0	1 - 5	Asp. Tox. 1, H304 Nota P,P Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 3, H412
1,2,4-TRIMETHYLBENZENE	(CAS-No.) 95-63-6 (EC-No.) 202-436-9	0.5 - 5	Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411
Organic pigment 2	Trade Secret	0.1 - 2	Substance not classified as hazardous
Xylene	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7	< 2	Flam. Liq. 3, H226 Acute Tox. 4, H332 Acute Tox. 4, H312 Skin Irrit. 2, H315 Nota C,C Asp. Tox. 1, H304 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) - 2,5-PYRROLIDINEDIONE	(CAS-No.) 79720-19-7 (EC-No.) 279-242-6	< 0.7	Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=10
D-LIMONENE	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5	< 0.5	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400,M=1 Aquatic Chronic 3, H412 Nota C,C
N-Butyl Methacrylate	(CAS-No.) 97-88-1 (EC-No.) 202-615-1	< 0.3	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT SE 3, H335 Nota D,D
Naphthalene	(CAS-No.) 91-20-3 (EC-No.) 202-049-5	< 0.3	Acute Tox. 4, H302 Carc. 2, H351 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
2,3-EPOXYPROPYL NEODECANOATE	(CAS-No.) 26761-45-5 (EC-No.) 247-979-2	< 0.2	Skin Sens. 1A, H317 Muta. 2, H341 Repr. 2, H361d Aquatic Chronic 2, H411
NICKEL SALTS OF NAPHTHENIC ACIDS	(CAS-No.) 61788-71-4 (EC-No.) 263-000-1	< 0.2	Acute Tox. 4, H302 Resp. Sens. 1, H334 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1A, H350i

			STOT RE 1, H372 Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=10
Naphthenic Acid	(CAS-No.) 1338-24-5 (EC-No.) 215-662-8	< 0.2	Eye Irrit. 2, H319 Skin Sens. 1A, H317 Repr. 2, H361d Aquatic Chronic 2, H411
GLYCOLIC ACID, BUTYL ESTER	(CAS-No.) 7397-62-8 (EC-No.) 230-991-7	< 0.2	Eye Dam. 1, H318 Repr. 2, H361d STOT SE 3, H335
Cumene	(CAS-No.) 98-82-8 (EC-No.) 202-704-5	< 0.2	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Carc. 1B, H350 STOT SE 3, H335 Aquatic Chronic 2, H411 STOT SE 3, H336
Toluene	(CAS-No.) 108-88-3 (EC-No.) 203-625-9	< 0.2	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Aquatic Chronic 3, H412

Any entry in the Identifier(s) column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance.
Please see section 16 for the full text of any H statements referred to in this section

Specific Concentration Limits

Ingredient	Identifier(s)	Specific Concentration Limits
2,3-EPOXYPROPYL NEODECANOATE	(CAS-No.) 26761-45-5 (EC-No.) 247-979-2	(C >= 0.001%) Skin Sens. 1A, H317

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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

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

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

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

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

The most important symptoms and effects based on the CLP classification include:
Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Dermal defatting (localized redness, itching, drying and cracking of skin). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

4.3. Indication of any immediate medical attention and special treatment required
Not applicable.

SECTION 5: Fire-fighting measures

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

5.2. Special hazards arising from the substance or mixture
Closed containers exposed to heat from fire may build pressure and explode. Exposure to extreme heat can give rise to thermal decomposition.

Hazardous Decomposition or By-Products

Substance	Condition
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
Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS. 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 vapors in the spill area to burn or explode.

6.2. Environmental precautions
Avoid release to the environment. For larger spills, cover drains and build dikes 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 authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

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
Do not breathe thermal decomposition products. 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/vapors/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 oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. 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 oxidizing agents.

7.3. Specific end use(s)
See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin, Ototoxicant
Cyclohexanone	108-94-1	ACGIH	TWA:20 ppm;STEL:50 ppm	A3: Confirmed animal carcin., Danger of cutaneous absorption
Xylene	1330-20-7	ACGIH	TWA:20 ppm	
Naphthalene	91-20-3	ACGIH	TWA:10 ppm	A3: Confirmed animal carcin., Danger of cutaneous absorption
1,2,4-TRIMETHYLBENZENE	95-63-6	ACGIH	TWA:10 ppm	A4: Not class. as human carcin
Cumene	98-82-8	ACGIH	TWA:5 ppm	A3: Confirmed animal carcin.

ACGIH : American Conference of Governmental Industrial Hygienists
CMRG : Chemical Manufacturer's Recommended Guidelines
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls
For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use with appropriate local exhaust ventilation sufficient to maintain levels of thermal decomposition products below their exposure guidelines. 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/vapors/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

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

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:
For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use a positive pressure supplied-air respirator.
Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates
Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Color	Red
Odor	Moderate Solvent
Odor threshold	*No Data Available*
Melting point/freezing point	*Not Applicable*
Boiling point/boiling range	>=140 ºC
Flammability	Flammable Liquid: Category 3.

Flammable Limits(LEL)	*No Data Available*
Flammable Limits(UEL)	*No Data Available*
Flash Point	52.2 ºC [*Test Method:*Closed Cup]
Autoignition temperature	*No Data Available*
Decomposition temperature	*No Data Available*
pH	*substance/mixture reacts with water*
Kinematic Viscosity	1,196 mm2/sec
Water solubility	*No Data Available*
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Vapor Pressure	<=493.3 Pa [@ 20 ºC]
Density	0.99 g/ml
Relative Density	0.99 [*Ref Std:*WATER=1]
Relative Vapor Density	*No Data Available*
Particle Characteristics	*Not Applicable*

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds	*No Data Available*
Evaporation rate	<=0.05 [*Ref Std:*BUOAC=1]
Molecular weight	*Not Applicable*
Percent volatile	50 - 65 % 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 polymerization will not occur.

10.4. Conditions to avoid
Sparks and/or flames

10.5. Incompatible materials
Strong oxidizing agents

10.6. Hazardous decomposition products

Substance	**Condition**
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition,

statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from internal hazard assessments.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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.
Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

May cause additional health effects (see below).

Skin Contact:
Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.
Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

May cause additional health effects (see below).

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

Ingestion:
May be harmful if swallowed.
Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:
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:
Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

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-Vapor(4 hr)		No data available; calculated ATE >20 - =50 mg/l

Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
Hydrocarbons, C10 aromatics, <1% naphthalene	Inhalation-Vapor	Professional judgement	LC50 estimated to be 20 - 50 mg/l
Hydrocarbons, C10 aromatics, <1% naphthalene	Dermal	Rabbit	LD50 > 2,000 mg/kg
Hydrocarbons, C10 aromatics, <1% naphthalene	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
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	Dermal	Rat	LD50 > 2,000 mg/kg
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.76 mg/l
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	Ingestion	Rat	LD50 > 2,000 mg/kg
1-methoxy-2-propyl acetate	Dermal	Rabbit	LD50 > 5,000 mg/kg
1-methoxy-2-propyl acetate	Inhalation-Vapor (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-Vapor (4 hours)	Rat	LC50 > 6.2 mg/l
Cyclohexanone	Ingestion	Rat	LD50 1,296 mg/kg
Light aromatic solvent naphtha (petroleum)	Dermal	Rabbit	LD50 > 2,000 mg/kg
Light aromatic solvent naphtha (petroleum)	Inhalation-Vapor (4 hours)	Rat	LC50 > 5.2 mg/l
Light aromatic solvent naphtha (petroleum)	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
Organic pigment 1	Dermal	Rat	LD50 > 2,500 mg/kg
Organic pigment 1	Ingestion	Rat	LD50 > 5,000 mg/kg
Organic pigment 1	Inhalation-Dust/Mist (4 hours)	similar compounds	LC50 > 5.2 mg/l
1,2,4-TRIMETHYLBENZENE	Dermal	Rabbit	LD50 > 3,160 mg/kg
1,2,4-TRIMETHYLBENZENE	Inhalation-Vapor (4 hours)	Rat	LC50 18 mg/l
1,2,4-TRIMETHYLBENZENE	Ingestion	Rat	LD50 3,400 mg/kg
Xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
Xylene	Inhalation-Vapor (4 hours)	Rat	LC50 29 mg/l
Xylene	Ingestion	Rat	LD50 3,523 mg/kg
Organic pigment 2	Dermal		LD50 estimated to be > 5,000 mg/kg
Organic pigment 2	Inhalation-Dust/Mist		LC50 estimated to be > 12.5 mg/l
Organic pigment 2	Ingestion		LD50 estimated to be > 5,000 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
D-LIMONENE	Inhalation-Vapor (4	Mouse	LC50 > 3.14 mg/l

	hours)		
D-LIMONENE	Dermal	Rabbit	LD50 > 5,000 mg/kg
D-LIMONENE	Ingestion	Rat	LD50 4,400 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
Naphthalene	Dermal	Human	LD50 estimated to be 2,000 - 5,000 mg/kg
Naphthalene	Inhalation-Vapor	Human	LC50 estimated to be 20 - 50 mg/l
Naphthalene	Ingestion	Human	LD50 estimated to be 300 - 2,000 mg/kg
Naphthenic Acid	Dermal	Rabbit	LD50 > 20,000 mg/kg
Naphthenic Acid	Ingestion	Rat	LD50 5,880 mg/kg
Cumene	Dermal	Rabbit	LD50 > 3,160 mg/kg
Cumene	Inhalation-Vapor (4 hours)	Rat	LC50 39.4 mg/l
Cumene	Ingestion	Rat	LD50 2,260 mg/kg
NICKEL SALTS OF NAPHTHENIC ACIDS	Ingestion	Rat	LD50 419 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-Vapor (4 hours)	Rat	LC50 30 mg/l
Toluene	Ingestion	Rat	LD50 5,550 mg/kg
GLYCOLIC ACID, BUTYL ESTER	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
GLYCOLIC ACID, BUTYL ESTER	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.2 mg/l
GLYCOLIC ACID, BUTYL ESTER	Ingestion	Rat	LD50 4,595 mg/kg
2,3-EPOXYPROPYL NEODECANOATE	Dermal	Rat	LD50 > 2,000 mg/kg
2,3-EPOXYPROPYL NEODECANOATE	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Hydrocarbons, C10 aromatics, <1% naphthalene	Rabbit	Minimal irritation
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	Rabbit	Irritant
1-methoxy-2-propyl acetate	Rabbit	No significant irritation
Cyclohexanone	Rabbit	Irritant
Light aromatic solvent naphtha (petroleum)	Rabbit	Irritant
Vinyl polymer	Professional judgement	No significant irritation
Organic pigment 1	Rabbit	No significant irritation
1,2,4-TRIMETHYLBENZENE	Rabbit	Irritant
Xylene	Rabbit	Mild irritant
Organic pigment 2	Professional judgement	No significant irritation
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	Rabbit	Corrosive
D-LIMONENE	Rabbit	Irritant
N-Butyl Methacrylate	Rabbit	Irritant
Naphthalene	Rabbit	Minimal irritation
Naphthenic Acid	Rabbit	Mild irritant
Cumene	Rabbit	Minimal irritation
NICKEL SALTS OF NAPHTHENIC ACIDS	Professional judgemen	Minimal irritation

	t	
Toluene	Rabbit	Irritant
GLYCOLIC ACID, BUTYL ESTER	Rabbit	No significant irritation
2,3-EPOXYPROPYL NEODECANOATE	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Hydrocarbons, C10 aromatics, <1% naphthalene	Rabbit	Mild irritant
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	Rabbit	Moderate irritant
1-methoxy-2-propyl acetate	Rabbit	Mild irritant
Cyclohexanone	In vitro data	Corrosive
Light aromatic solvent naphtha (petroleum)	Rabbit	Mild irritant
Vinyl polymer	Professional judgement	No significant irritation
Organic pigment 1	Rabbit	No significant irritation
1,2,4-TRIMETHYLBENZENE	Rabbit	Mild irritant
Xylene	Rabbit	Mild irritant
Organic pigment 2	Professional judgement	No significant irritation
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	Rabbit	Corrosive
D-LIMONENE	Rabbit	Mild irritant
N-Butyl Methacrylate	Rabbit	Mild irritant
Naphthalene	Rabbit	No significant irritation
Naphthenic Acid	Rabbit	Moderate irritant
Cumene	Rabbit	Mild irritant
NICKEL SALTS OF NAPHTHENIC ACIDS	Professional judgement	Mild irritant
Toluene	Rabbit	Moderate irritant
GLYCOLIC ACID, BUTYL ESTER	Rabbit	Corrosive
2,3-EPOXYPROPYL NEODECANOATE	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Hydrocarbons, C10 aromatics, <1% naphthalene	Guinea pig	Not classified
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	Human and animal	Not classified
1-methoxy-2-propyl acetate	Guinea pig	Not classified
Cyclohexanone	Guinea pig	Not classified
Light aromatic solvent naphtha (petroleum)	Guinea pig	Not classified
Organic pigment 1	Mouse	Not classified
1,2,4-TRIMETHYLBENZENE	Guinea pig	Not classified
D-LIMONENE	Mouse	Sensitizing
N-Butyl Methacrylate	Guinea pig	Sensitizing
Naphthenic Acid	Guinea pig	Sensitizing
Cumene	Guinea	Not classified

	pig	
NICKEL SALTS OF NAPHTHENIC ACIDS	similar compounds	Sensitizing
Toluene	Guinea pig	Not classified
GLYCOLIC ACID, BUTYL ESTER	Guinea pig	Not classified
2,3-EPOXYPROPYL NEODECANOATE	Guinea pig	Sensitizing

Respiratory Sensitization

Name	Species	Value
NICKEL SALTS OF NAPHTHENIC ACIDS	Professional judgement	Sensitizing

Germ Cell Mutagenicity

Name	Route	Value
Hydrocarbons, C10 aromatics, <1% naphthalene	In Vitro	Not mutagenic
Hydrocarbons, C10 aromatics, <1% naphthalene	In vivo	Not mutagenic
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	In Vitro	Not mutagenic
1-methoxy-2-propyl acetate	In Vitro	Not mutagenic
Cyclohexanone	In Vitro	Not mutagenic
Cyclohexanone	In vivo	Not mutagenic
Organic pigment 1	In Vitro	Not mutagenic
1,2,4-TRIMETHYLBENZENE	In Vitro	Not mutagenic
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	In Vitro	Not mutagenic
D-LIMONENE	In Vitro	Not mutagenic
D-LIMONENE	In vivo	Not mutagenic
N-Butyl Methacrylate	In Vitro	Not mutagenic
N-Butyl Methacrylate	In vivo	Not mutagenic
Naphthenic Acid	In vivo	Not mutagenic
Naphthenic Acid	In Vitro	Some positive data exist, but the data are not sufficient for classification
Cumene	In Vitro	Not mutagenic
Cumene	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
Toluene	In Vitro	Not mutagenic
Toluene	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

Carcinogenicity

Name	Route	Species	Value
Cyclohexanone	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Light aromatic solvent naphtha (petroleum)	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Xylene	Dermal	Rat	Not carcinogenic
Xylene	Ingestion	Multiple animal	Not carcinogenic

		species	
Xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
D-LIMONENE	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
N-Butyl Methacrylate	Inhalation	Multiple animal species	Carcinogenic
Naphthalene	Inhalation	Multiple animal species	Carcinogenic
Cumene	Inhalation	Multiple animal species	Carcinogenic
NICKEL SALTS OF NAPHTHENIC ACIDS	Inhalation	similar compounds	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

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Hydrocarbons, C10 aromatics, <1% naphthalene	Not Specified	Not classified for female reproduction	Rat	NOAEL Not available	2 generation
Hydrocarbons, C10 aromatics, <1% naphthalene	Not Specified	Not classified for male reproduction	Rat	NOAEL Not available	2 generation
Hydrocarbons, C10 aromatics, <1% naphthalene	Not Specified	Not classified for development	Rat	NOAEL Not available	2 generation
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	Ingestion	Not classified for development	Rat	NOAEL 600 mg/kg/day	during gestation
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	Ingestion	Not classified for female reproduction	Rat	NOAEL 250 mg/kg/day	premating into lactation
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	Ingestion	Toxic to male reproduction	Rat	NOAEL 250 mg/kg/day	5 weeks
1-methoxy-2-propyl acetate	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-methoxy-2-propyl acetate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-methoxy-2-propyl acetate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-methoxy-2-propyl acetate	Inhalation	Not classified for development	Rat	NOAEL 21.6 mg/l	during organogenesis
Cyclohexanone	Inhalation	Not classified for female reproduction	Rat	NOAEL 4 mg/l	2 generation
Cyclohexanone	Ingestion	Not classified for development	Rabbit	NOAEL 500 mg/kg/day	during gestation
Cyclohexanone	Inhalation	Not classified for male reproduction	Rat	NOAEL 2 mg/l	2 generation

Cyclohexanone	Inhalation	Not classified for development	Rat	NOAEL 2.6 mg/l	during gestation
Light aromatic solvent naphtha (petroleum)	Inhalation	Not classified for female reproduction	Rat	NOAEL 1,500 ppm	2 generation
Light aromatic solvent naphtha (petroleum)	Inhalation	Not classified for male reproduction	Rat	NOAEL 1,500 ppm	2 generation
Light aromatic solvent naphtha (petroleum)	Inhalation	Not classified for development	Rat	NOAEL 500 ppm	2 generation
Organic pigment 1	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Organic pigment 1	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	30 days
Organic pigment 1	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation
1,2,4-TRIMETHYLBENZENE	Inhalation	Not classified for female reproduction	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-TRIMETHYLBENZENE	Inhalation	Not classified for male reproduction	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-TRIMETHYLBENZENE	Inhalation	Not classified for development	Rat	NOAEL 1.5 mg/l	during gestation
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
D-LIMONENE	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	premating & during gestation
D-LIMONENE	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 mg/kg/day	during organogenesis
N-Butyl Methacrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	44 days
N-Butyl Methacrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL 300 mg/kg/day	premating & during gestation
N-Butyl Methacrylate	Ingestion	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during gestation
N-Butyl Methacrylate	Inhalation	Not classified for development	Rat	NOAEL 1.8 mg/l	during gestation
Naphthenic Acid	Ingestion	Not classified for female reproduction	Rat	NOAEL 900 mg/kg/day	premating into lactation
Naphthenic Acid	Ingestion	Not classified for male reproduction	Rat	NOAEL 900 mg/kg/day	28 days
Naphthenic Acid	Ingestion	Toxic to development	Rat	NOAEL 100 mg/kg/day	premating into lactation
Cumene	Inhalation	Not classified for development	Rabbit	NOAEL 11.3 mg/l	during organogenesis
NICKEL SALTS OF NAPHTHENIC ACIDS	Ingestion	Toxic to development	similar compounds	NOAEL not available	2 generation
Toluene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.3 mg/l	1 generation
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
Toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse
GLYCOLIC ACID, BUTYL ESTER	Ingestion	Toxic to development	Rat	NOAEL 250 mg/kg/day	during organogenesis

2,3-EPOXYPROPYL NEODECANOATE	Ingestion	Not classified for female reproduction	Rat	NOAEL 300 mg/kg/day	2 generation
2,3-EPOXYPROPYL NEODECANOATE	Ingestion	Not classified for male reproduction	Rat	NOAEL 300 mg/kg/day	2 generation
2,3-EPOXYPROPYL NEODECANOATE	Ingestion	Toxic to development	Rat	NOAEL 50 mg/kg/day	2 generation

Lactation

Name	Route	Species	Value
Xylene	Ingestion	Mouse	Not classified for effects on or via lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Hydrocarbons, C10 aromatics, <1% naphthalene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
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	
Cyclohexanone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Guinea pig	LOAEL 16.1 mg/l	6 hours
Cyclohexanone	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	
Cyclohexanone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Light aromatic solvent naphtha (petroleum)	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Light aromatic solvent naphtha (petroleum)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Professional judgement	NOAEL Not available	
Light aromatic solvent naphtha (petroleum)	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
1,2,4-TRIMETHYLBENZENE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
1,2,4-TRIMETHYLBENZENE	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
1,2,4-TRIMETHYLBENZENE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	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
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	
D-LIMONENE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
D-LIMONENE	Ingestion	nervous system	Not classified		NOAEL Not available	
N-Butyl Methacrylate	Inhalation	respiratory irritation	May cause respiratory irritation		NOAEL Not available	
Naphthalene	Ingestion	blood	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
Naphthenic Acid	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Cumene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
Cumene	Inhalation	respiratory irritation	May cause respiratory irritation	Human	LOAEL 0.2 mg/l	occupational exposure
Cumene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	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 depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
GLYCOLIC ACID, BUTYL ESTER	Inhalation	respiratory irritation	May cause respiratory irritation	Rat	NOAEL 0.4 mg/l	4 hours

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	Inhalation	hematopoietic system | eyes | respiratory system	Not classified	Rat	NOAEL 2.23 mg/l	13 weeks
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol	Ingestion	liver | kidney and/or bladder | heart | skin | endocrine system | gastrointestinal tract | bone, teeth, nails,	Not classified	Rat	NOAEL 750 mg/kg/day	5 weeks

and 1-methyl-4-(1-methylethylidene)-cyclohexanol		and/or hair | hematopoietic system | immune system | muscles | nervous system | respiratory system				
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
Cyclohexanone	Inhalation	liver | kidney and/or bladder | heart | skin | endocrine system | gastrointestinal tract | bone, teeth, nails, and/or hair | hematopoietic system | immune system | muscles | nervous system | eyes | respiratory system | vascular system	Not classified	Rat	NOAEL 2.5 mg/l	13 weeks
Cyclohexanone	Ingestion	hematopoietic system | eyes | kidney and/or bladder	Not classified	Rat	NOAEL 407 mg/kg/day	3 months
Organic pigment 1	Inhalation	respiratory system	May cause damage to organs though prolonged or repeated exposure	similar compounds	NOAEL 0.001 mg/l	90 days
1,2,4-TRIMETHYLBENZENE	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.5 mg/l	3 months
1,2,4-TRIMETHYLBENZENE	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.1 mg/l	3 months
1,2,4-TRIMETHYLBENZENE	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
1,2,4-TRIMETHYLBENZENE	Inhalation	liver | kidney and/or bladder | heart | endocrine system | gastrointestinal tract | immune system	Not classified	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-TRIMETHYLBENZENE	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 600 mg/kg/day	14 days
1,2,4-TRIMETHYLBENZENE	Ingestion	liver | immune system | kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 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 |	Not classified	Multiple animal species	NOAEL 3.5 mg/l	13 weeks

		kidney and/or bladder | respiratory system				
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
D-LIMONENE	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 75 mg/kg/day	103 weeks
D-LIMONENE	Ingestion	liver	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
D-LIMONENE	Ingestion	heart | endocrine system | bone, teeth, nails, and/or hair | hematopoietic system | immune system | muscles | nervous system | respiratory system	Not classified	Rat	NOAEL 600 mg/kg/day	103 weeks
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 system	Not classified	Rat	NOAEL 11 mg/l	28 days
N-Butyl Methacrylate	Ingestion	olfactory system	Not classified	Rat	NOAEL 60 mg/kg/day	90 days
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
Naphthalene	Dermal	blood	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Naphthalene	Dermal	eyes	Not classified	Human	NOAEL Not available	occupational exposure
Naphthalene	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.01 mg/l	13 weeks
Naphthalene	Inhalation	blood	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Naphthalene	Inhalation	eyes	Not classified	Human	NOAEL Not available	occupational exposure
Naphthalene	Ingestion	blood	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Naphthalene	Ingestion	eyes	May cause damage to organs though prolonged or repeated exposure	Rabbit	LOAEL 500 mg/kg/day	15 days
Naphthenic Acid	Ingestion	endocrine system |	Not classified	Rat	NOAEL 881	90 days

		liver | heart | skin | gastrointestinal tract | bone, teeth, nails, and/or hair | hematopoietic system | immune system | muscles | nervous system | eyes | kidney and/or bladder | respiratory system | vascular system			mg/kg/day	
Cumene	Inhalation	auditory system | endocrine system | hematopoietic system | liver | nervous system | eyes	Not classified	Rat	NOAEL 59 mg/l	13 weeks
Cumene	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4.9 mg/l	13 weeks
Cumene	Inhalation	respiratory system	Not classified	Rat	NOAEL 59 mg/l	13 weeks
Cumene	Ingestion	kidney and/or bladder | heart | endocrine system | hematopoietic system | liver | respiratory system	Not classified	Rat	NOAEL 769 mg/kg/day	6 months
NICKEL SALTS OF NAPHTHENIC ACIDS	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	similar compounds	NOAEL not available	13 weeks
Toluene	Inhalation	auditory system | nervous system | eyes | olfactory system	Causes damage to organs through 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
GLYCOLIC ACID,	Ingestion	blood | kidney	Some positive data exist, but the	Rat	NOAEL 100	90 days

BUTYL ESTER		and/or bladder	data are not sufficient for classification		mg/kg/day	
2,3-EPOXYPROPYL NEODECANOATE	Ingestion	endocrine system | hematopoietic system | liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days
2,3-EPOXYPROPYL NEODECANOATE	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 100 mg/kg/day	90 days
2,3-EPOXYPROPYL NEODECANOATE	Ingestion	heart | skin | gastrointestinal tract | bone, teeth, nails, and/or hair | immune system | nervous system | eyes | respiratory system | vascular system	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days

Aspiration Hazard

Name	Value
Hydrocarbons, C10 aromatics, <1% naphthalene	Aspiration hazard
Light aromatic solvent naphtha (petroleum)	Aspiration hazard
1,2,4-TRIMETHYLBENZENE	Aspiration hazard
Xylene	Aspiration hazard
D-LIMONENE	Aspiration hazard
Cumene	Aspiration hazard
Toluene	Aspiration hazard

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

11.2. Information on other hazards

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

SECTION 12: Ecological information

The information below may not agree with the 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 #	Organism	Type	Exposure	Test Endpoint	Test Result
Hydrocarbons, C10 aromatics, <1% naphthalene	918-811-1	Green algae	Estimated	72 hours	EL50	3 mg/l
Hydrocarbons, C10 aromatics, <1% naphthalene	918-811-1	Rainbow Trout	Estimated	96 hours	LL50	5 mg/l
Hydrocarbons, C10 aromatics, <1% naphthalene	918-811-1	Water flea	Estimated	48 hours	EL50	10 mg/l
Hydrocarbons, C10 aromatics, <1% naphthalene	918-811-1	Green algae	Estimated	72 hours	NOEL	1 mg/l
2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate and methyl	28262-63-7	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

2-methyl-2-propenoate						
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	701-188-3	Green algae	Experimental	72 hours	EC50	68 mg/l
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	701-188-3	Water flea	Experimental	48 hours	EC50	73 mg/l
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	701-188-3	Zebra Fish	Experimental	96 hours	LC50	62-80 mg/l
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	701-188-3	Green algae	Experimental	72 hours	NOEC	3.9 mg/l
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	701-188-3	Redworm	Experimental	14 days	LC50	499-799 mg/kg (Dry Weight)
1-methoxy-2-propyl acetate	108-65-6	Activated sludge	Experimental	30 minutes	EC10	>1,000 mg/l
1-methoxy-2-propyl acetate	108-65-6	Green algae	Experimental	72 hours	ErC50	>1,000 mg/l
1-methoxy-2-propyl acetate	108-65-6	Rainbow Trout	Experimental	96 hours	LC50	134 mg/l
1-methoxy-2-propyl acetate	108-65-6	Water flea	Experimental	48 hours	EC50	370 mg/l
1-methoxy-2-propyl acetate	108-65-6	Green algae	Experimental	72 hours	NOEC	1,000 mg/l
1-methoxy-2-propyl acetate	108-65-6	Water flea	Experimental	21 days	NOEC	100 mg/l
Cyclohexanone	108-94-1	Activated sludge	Experimental	30 minutes	EC50	>1,000 mg/l
Cyclohexanone	108-94-1	Algae or other aquatic plants	Experimental	72 hours	ErC50	32.9 mg/l
Cyclohexanone	108-94-1	Fathead Minnow	Experimental	96 hours	LC50	527 mg/l
Cyclohexanone	108-94-1	Water flea	Experimental	24 hours	EC50	800 mg/l

Cyclohexanone	108-94-1	Algae or other aquatic plants	Experimental	72 hours	ErC10	3.56 mg/l
1,2,4-TRIMETHYLBENZENE	95-63-6	Fathead Minnow	Experimental	96 hours	LC50	7.72 mg/l
1,2,4-TRIMETHYLBENZENE	95-63-6	Mysid Shrimp	Experimental	96 hours	LC50	2 mg/l
1,2,4-TRIMETHYLBENZENE	95-63-6	Water flea	Experimental	48 hours	LC50	3.6 mg/l
1,2,4-TRIMETHYLBENZENE	95-63-6	Water flea	Analogous Compound	21 days	NOEC	0.4 mg/l
Light aromatic solvent naphtha (petroleum)	64742-95-6	Fathead Minnow	Estimated	96 hours	LL50	8.2 mg/l
Light aromatic solvent naphtha (petroleum)	64742-95-6	Green algae	Estimated	72 hours	EL50	7.9 mg/l
Light aromatic solvent naphtha (petroleum)	64742-95-6	Water flea	Estimated	48 hours	EL50	3.2 mg/l
Light aromatic solvent naphtha (petroleum)	64742-95-6	Green algae	Estimated	72 hours	NOEL	0.22 mg/l
Light aromatic solvent naphtha (petroleum)	64742-95-6	Water flea	Experimental	21 days	NOEL	2.6 mg/l
Organic pigment 1	5521-31-3	Activated sludge	Experimental	30 minutes	EC50	>1,000 mg/l
Organic pigment 1	5521-31-3	Golden Orfe	Experimental	96 hours	LC50	>10,000 mg/l
Organic pigment 1	5521-31-3	Green algae	Experimental	72 hours	ErC50	>100 mg/l
Organic pigment 1	5521-31-3	Water flea	Experimental	48 hours	EC50	>100 mg/l
Organic pigment 1	5521-31-3	Green algae	Experimental	72 hours	EC50	100 mg/l
Vinyl polymer	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Organic pigment 2	Trade Secret	Duckweed	Analogous Compound	7 days	No tox obs at lmt of water sol	>100 mg/l
Organic pigment 2	Trade Secret	Green algae	Analogous Compound	72 hours	ErC50	>100 mg/l
Organic pigment 2	Trade Secret	Water flea	Analogous Compound	48 hours	No tox obs at lmt of water sol	>100 mg/l
Organic pigment 2	Trade Secret	Zebra Fish	Experimental	96 hours	LC50	>5,000 mg/l
Organic pigment 2	Trade Secret	Duckweed	Analogous Compound	7 days	No tox obs at lmt of water sol	100 mg/l
Organic pigment 2	Trade Secret	Green algae	Analogous Compound	72 hours	NOEC	>=100 mg/l
Organic pigment 2	Trade Secret	Activated sludge	Experimental	30 minutes	EC20	>700 mg/l
Xylene	1330-20-7	Activated sludge	Estimated	3 hours	NOEC	157 mg/l
Xylene	1330-20-7	Green algae	Estimated	72 hours	EC50	4.36 mg/l
Xylene	1330-20-7	Rainbow Trout	Estimated	96 hours	LC50	2.6 mg/l
Xylene	1330-20-7	Water flea	Estimated	48 hours	EC50	3.82 mg/l
Xylene	1330-20-7	Green algae	Estimated	72 hours	NOEC	0.44 mg/l
Xylene	1330-20-7	Water flea	Estimated	7 days	NOEC	0.96 mg/l
Xylene	1330-20-7	Rainbow Trout	Experimental	56 days	NOEC	>1.3 mg/l
3-DODECYL-1-(2,2,6,6-	79720-19-7	Common Carp	Experimental	96 hours	LC50	0.097 mg/l

TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE						
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	79720-19-7	Green algae	Experimental	72 hours	ErC50	0.374 mg/l
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	79720-19-7	Water flea	Experimental	48 hours	EC50	0.501 mg/l
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	79720-19-7	Green algae	Experimental	72 hours	ErC10	0.236 mg/l
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	79720-19-7	Activated sludge	Experimental	3 hours	EC50	58.9 mg/l
D-LIMONENE	5989-27-5	Fathead Minnow	Experimental	96 hours	LC50	0.702 mg/l
D-LIMONENE	5989-27-5	Green algae	Experimental	72 hours	ErC50	0.32 mg/l
D-LIMONENE	5989-27-5	Water flea	Experimental	48 hours	EC50	0.307 mg/l
D-LIMONENE	5989-27-5	Fathead Minnow	Experimental	8 days	EC10	0.32 mg/l
D-LIMONENE	5989-27-5	Green algae	Experimental	72 hours	ErC10	0.174 mg/l
D-LIMONENE	5989-27-5	Water flea	Experimental	21 days	NOEC	0.153 mg/l
Naphthalene	91-20-3	Diatom	Experimental	72 hours	EbC50	0.4 mg/l
Naphthalene	91-20-3	Invertebrate	Experimental	96 hours	LC50	2.35 mg/l
Naphthalene	91-20-3	Rainbow Trout	Experimental	96 hours	LC50	0.11 mg/l
Naphthalene	91-20-3	Water flea	Experimental	48 hours	EC50	1.6 mg/l
Naphthalene	91-20-3	Coho salmon	Experimental	40 days	NOEC	0.37 mg/l
Naphthalene	91-20-3	Duckweed	Experimental	8 days	NOEC	16 mg/l
Naphthalene	91-20-3	Invertebrate	Experimental	21 days	NOEC	0.5 mg/l
Naphthalene	91-20-3	Pink Salmon	Experimental	40 days	NOEC	0.12 mg/l
Naphthalene	91-20-3	Bacteria	Experimental	24 hours	IC50	29 mg/l
N-Butyl Methacrylate	97-88-1	Diatom	Experimental	96 hours	ErC50	>1,260 mg/l
N-Butyl Methacrylate	97-88-1	Green algae	Experimental	72 hours	ErC50	23 mg/l
N-Butyl Methacrylate	97-88-1	Medaka	Experimental	96 hours	LC50	5.57 mg/l
N-Butyl Methacrylate	97-88-1	Water flea	Experimental	48 hours	EC50	25.4 mg/l
N-Butyl Methacrylate	97-88-1	Diatom	Experimental	96 hours	NOEC	530 mg/l

N-Butyl Methacrylate	97-88-1	Green algae	Experimental	72 hours	NOEC	7.1 mg/l
N-Butyl Methacrylate	97-88-1	Water flea	Experimental	21 days	NOEC	1.1 mg/l
N-Butyl Methacrylate	97-88-1	Activated sludge	Experimental	3 hours	EC50	204 mg/l
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Activated sludge	Experimental	3 hours	NOEC	500 mg/l
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Green algae	Experimental	72 hours	ErC50	2.9 mg/l
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Rainbow Trout	Experimental	96 hours	LC50	5 mg/l
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Water flea	Experimental	48 hours	EC50	4.8 mg/l
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Green algae	Experimental	96 hours	NOEC	1 mg/l
Cumene	98-82-8	Activated sludge	Experimental	3 hours	EC10	>2,000 mg/l
Cumene	98-82-8	Green algae	Experimental	72 hours	EC50	2.6 mg/l
Cumene	98-82-8	Mysid Shrimp	Experimental	96 hours	EC50	1.2 mg/l
Cumene	98-82-8	Rainbow Trout	Experimental	96 hours	LC50	2.7 mg/l
Cumene	98-82-8	Water flea	Experimental	48 hours	EC50	2.14 mg/l
Cumene	98-82-8	Green algae	Experimental	72 hours	NOEC	0.22 mg/l
Cumene	98-82-8	Water flea	Experimental	21 days	NOEC	0.35 mg/l
GLYCOLIC ACID, BUTYL ESTER	7397-62-8	Bacteria	Experimental	18 hours	EC50	2,320 mg/l
GLYCOLIC ACID, BUTYL ESTER	7397-62-8	Water flea	Experimental	24 hours	EC50	280 mg/l
Naphthenic Acid	1338-24-5	Copepod	Analogous Compound	96 hours	LC50	4.8 mg/l
Naphthenic Acid	1338-24-5	Fathead Minnow	Experimental	96 hours	LC50	5.62 mg/l
Naphthenic Acid	1338-24-5	Water flea	Experimental	48 hours	EC50	20 mg/l
Naphthenic Acid	1338-24-5	Fathead Minnow	Experimental	7 days	NOEC	0.4 mg/l
Naphthenic Acid	1338-24-5	Water flea	Experimental	7 days	NOEC	1.5 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Fathead Minnow	Estimated	96 hours	LC50	2.5 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Fish	Estimated	96 hours	LC50	9.5 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Green algae	Estimated	72 hours	ErC50	0.44 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Water flea	Estimated	48 hours	LC50	0.083 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	African clawed frog	Estimated	101 hours	EC10	0.54 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Green algae	Estimated	72 hours	ErC10	0.031 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Scud	Estimated	28 days	EC10	522 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Water flea	Estimated	7 days	EC10	0.007 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Zebra Fish	Estimated	8 days	NOEC	0.25 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Activated sludge	Estimated	30 minutes	EC50	210 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Mallard Duck	Estimated	90 days	NOEC	1,274 ppm diet

NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Redworm	Estimated	28 days	EC10	303 mg/kg (Dry Weight)
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Soil microbes	Estimated	28 days	EC10	102 mg/kg (Dry Weight)
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Springtail	Estimated	28 days	NOEC	232 mg/kg (Dry Weight)
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Tomato	Estimated	21 days	NOEC	70 mg/kg (Dry Weight)
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 sludge	Experimental	12 hours	IC50	292 mg/l
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)

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Hydrocarbons, C10 aromatics, <1% naphthalene	918-811-1	Experimental Biodegradation	28 days	Biological Oxygen Demand	49.6 %BOD/COD	OECD 301F - Manometric Respiro
2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate	28262-63-7	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	701-188-3	Experimental Biodegradation	28 days	Carbon dioxide evolution	80 %CO2 evolution/THCO2 evolution	OECD 310 CO2 Headspace
1-methoxy-2-propyl acetate	108-65-6	Experimental Biodegradation	28 days	Biological Oxygen Demand	87.2 %BOD/ThOD	OECD 301C - MITI (I)
1-methoxy-2-propyl acetate	108-65-6	Experimental Aquatic Inherent Biodegrad.		Dissolv. Organic Carbon Deplet	>100 %removal of DOC	similar to OECD 302B
Cyclohexanone	108-94-1	Experimental Biodegradation	14 days	Biological Oxygen Demand	87 %BOD/ThOD	OECD 301C - MITI (I)
1,2,4-TRIMETHYLBENZENE	95-63-6	Experimental Biodegradation	28 days	Biological Oxygen Demand	>60 %BOD/ThOD	OECD 301F - Manometric Respiro
1,2,4-TRIMETHYLBENZENE	95-63-6	Experimental Photolysis		Photolytic half-life (in air)	11.8 hours (t 1/2)	

Light aromatic solvent naphtha (petroleum)	64742-95-6	Estimated Biodegradation	28 days	Biological Oxygen Demand	78 %BOD/COD	OECD 301F - Manometric Respiro
Organic pigment 1	5521-31-3	Experimental Biodegradation	28 days	Biological Oxygen Demand	0-10 %BOD/ThOD	OECD 301F - Manometric Respiro
Vinyl polymer	Trade Secret	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Organic pigment 2	Trade Secret	Analogous Compound Biodegradation	28 days	Biological Oxygen Demand	<10 %BOD/ThOD	OECD 301F - Manometric Respiro
Xylene	1330-20-7	Experimental Biodegradation	28 days	Biological Oxygen Demand	90-98 %BOD/ThOD	OECD 301F - Manometric Respiro
Xylene	1330-20-7	Experimental Photolysis		Photolytic half-life (in air)	1.4 days (t 1/2)	
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	79720-19-7	Experimental Biodegradation	28 days	Carbon dioxide evolution	0 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	79720-19-7	Experimental Aquatic Inherent Biodegrad.	28 days	Biological Oxygen Demand	3 %BOD/ThOD	OECD 302C - Modified MITI (II)
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	79720-19-7	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	OECD 111 Hydrolysis func of pH
D-LIMONENE	5989-27-5	Experimental Biodegradation	14 days	Biological Oxygen Demand	98 %BOD/ThOD	OECD 301C - MITI (I)
D-LIMONENE	5989-27-5	Experimental Biodegradation	14 days	Dissolv. Organic Carbon Deplet	>93.8 %removal of DOC	OECD 303A - Simulated Aerobic
Naphthalene	91-20-3	Experimental Biodegradation	14 days	Carbon dioxide evolution	>99 %CO2 evolution/THCO2 evolution	
Naphthalene	91-20-3	Experimental Biodegradation	28 days	Biological Oxygen Demand	>74 %BOD/ThOD	OECD 301C - MITI (I)
Naphthalene	91-20-3	Experimental Aquatic Inherent Biodegrad.	28 days	Biological Oxygen Demand	2 %BOD/ThOD	similar to OECD 302C
Naphthalene	91-20-3	Experimental Photolysis		Photolytic half-life (in air)	1.2 days (t 1/2)	
Naphthalene	91-20-3	Experimental Soil Metabolism Aerobic	10 days	Percent degraded	90 %degraded	
N-Butyl Methacrylate	97-88-1	Experimental Biodegradation	28 days	Biological Oxygen Demand	88 %BOD/ThOD	OECD 301C - MITI (I)
N-Butyl Methacrylate	97-88-1	Experimental Photolysis		Photolytic half-life (in air)	5.4 hours (t 1/2)	
N-Butyl Methacrylate	97-88-1	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	OECD 111 Hydrolysis func of pH
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Experimental Biodegradation	28 days	Biological Oxygen Demand	11.6 %BOD/ThOD	OECD 301F - Manometric Respiro
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
Cumene	98-82-8	Experimental Biodegradation	14 days	Biological Oxygen Demand	33 %BOD/ThOD	OECD 301C - MITI (I)
Cumene	98-82-8	Experimental Photolysis		Photolytic half-life (in air)	4.5 days (t 1/2)	
GLYCOLIC ACID, BUTYL ESTER	7397-62-8	Experimental Biodegradation	28 days	Carbon dioxide evolution	81 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Naphthenic Acid	1338-24-5	Data not availbl-insufficient	N/A	N/A	N/A	N/A
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Toluene	108-88-3	Experimental Biodegradation	20 days	Biological Oxygen Demand	80 %BOD/ThOD	APHA Std Meth Water/Wastewater
Toluene	108-88-3	Experimental Photolysis		Photolytic half-life (in air)	5.2 days (t 1/2)	

12.3. Bioaccumulative potential

Material	Cas No.	Test Type	Duration	Study Type	Test Result	Protocol
Hydrocarbons, C10 aromatics, <1% naphthalene	918-811-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
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
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	701-188-3	Analogous Compound Bioconcentration		Log of Octanol/H2O part. coeff	2.78	
1-methoxy-2-propyl acetate	108-65-6	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.36	OECD 107 log Kow shke flsk mtd
Cyclohexanone	108-94-1	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.86	OECD 107 log Kow shke flsk mtd
1,2,4-TRIMETHYLBENZENE	95-63-6	Experimental BCF - Fish	56 days	Bioaccumulation Factor	≤275	OECD305-Bioconcentration
1,2,4-TRIMETHYLBENZENE	95-63-6	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	3.63	
Light aromatic solvent naphtha (petroleum)	64742-95-6	Estimated BCF - Fish	42 days	Bioaccumulation Factor	598	OECD305-Bioconcentration
Organic pigment 1	5521-31-3	Modeled Bioconcentration		Bioaccumulation Factor	6.8	Catalogic™
Vinyl polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Organic pigment 2	Trade Secret	Estimated Bioconcentration		Log of Octanol/H2O part. coeff	<1.3	
Xylene	1330-20-7	Experimental BCF - Fish	56 days	Bioaccumulation Factor	25.9	
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	79720-19-7	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	≥5.7	EC A.8 Partition Coefficient
D-LIMONENE	5989-27-5	Modeled Bioconcentration		Bioaccumulation Factor	2100	Catalogic™
D-LIMONENE	5989-27-5	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	4.57	
Naphthalene	91-20-3	Experimental BCF - Fish	56 days	Bioaccumulation Factor	≤168	OECD305-Bioconcentration
Naphthalene	91-20-3	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	3.7	OECD 117 log Kow HPLC method
N-Butyl Methacrylate	97-88-1	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	3.03	OECD 107 log Kow shke flsk mtd
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Modeled Bioconcentration		Bioaccumulation Factor	28	Catalogic™
Cumene	98-82-8	Modeled Bioconcentration		Bioaccumulation Factor	140	Catalogic™
Cumene	98-82-8	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	3.55	OECD 107 log Kow shke flsk mtd

GLYCOLIC ACID, BUTYL ESTER	7397-62-8	Modeled Bioconcentration		Bioaccumulation Factor	2.8	Catalogic™
Naphthenic Acid	1338-24-5	Experimental BCF - Fish	10 days	Bioaccumulation Factor	4	
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Analogous Compound Bioconcentration	180 days	Bioaccumulation Factor	4	
Toluene	108-88-3	Experimental BCF - Other	72 hours	Bioaccumulation Factor	90	
Toluene	108-88-3	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	2.73	

12.4. Mobility in soil

Material	Cas No.	Test Type	Study Type	Test Result	Protocol
Reaction mass of α,α-4-trimethyl-(1S)-3-cyclohexene-1-methanol and α,α-4-trimethyl-(1R)-3-cyclohexene-1-methanol and 1-methyl-4-(1-methylethylidene)-cyclohexanol	701-188-3	Modeled Mobility in Soil	Koc	213 l/kg	Episuite™
1-methoxy-2-propyl acetate	108-65-6	Experimental Mobility in Soil	Koc	4 l/kg	Episuite™
Cyclohexanone	108-94-1	Modeled Mobility in Soil	Koc	39 l/kg	Episuite™
1,2,4-TRIMETHYLBENZENE	95-63-6	Modeled Mobility in Soil	Koc	1,400 l/kg	Episuite™
Organic pigment 2	Trade Secret	Modeled Mobility in Soil	Koc	93,500 l/kg	Episuite™
3-DODECYL-1-(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) -2,5-PYRROLIDINEDIONE	79720-19-7	Modeled Mobility in Soil	Koc	>430000 l/kg	OECD 121 Estim. of Koc by HPLC
D-LIMONENE	5989-27-5	Modeled Mobility in Soil	Koc	9,245 l/kg	Episuite™
Naphthalene	91-20-3	Experimental Mobility in Soil	Koc	378 l/kg	
N-Butyl Methacrylate	97-88-1	Analogous Compound Mobility in Soil	Koc	1,480 l/kg	OECD 106 Adsp-Desb Batch Equil
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Experimental Mobility in Soil	Koc	143 l/kg	OECD 121 Estim. of Koc by HPLC
Cumene	98-82-8	Modeled Mobility in Soil	Koc	700	Episuite™
Naphthenic Acid	1338-24-5	Experimental Mobility in Soil	Koc	660 l/kg	
Toluene	108-88-3	Experimental Mobility in Soil	Koc	37-160 l/kg	

12.5. Results of the PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste 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/CE 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)

080111*	Waste paint and varnish containing organic solvents or other dangerous substances
200127*	Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	UN1210	UN1210	UN1210
14.2 UN proper shipping name	PRINTING INK(HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM))	PRINTING INK(HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM))	PRINTING INK(HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM))
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	III	III	III
14.5 Environmental hazards	Environmentally Hazardous	Not applicable	Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Marine Transport in bulk according to IMO instruments	No Data Available	No Data Available	No Data Available
Control Temperature	No Data Available	No Data Available	No Data Available
Emergency Temperature	No Data Available	No Data Available	No Data Available

ADR Classification Code	F1	Not Applicable	Not Applicable
IMDG Segregation Code	Not Applicable	Not Applicable	NONE

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

SECTION 15: Regulatory information

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

Carcinogenicity

Ingredient	C.A.S. No.	Classification	Regulation
Cumene	98-82-8	Carc. 1B	Regulation (EC) No. 1272/2008, Table 3.1
Cumene	98-82-8	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
D-LIMONENE	5989-27-5	Gr. 3: Not classifiable	International Agency for Research on Cancer
Naphthalene	91-20-3	Carc. 2	Regulation (EC) No. 1272/2008, Table 3.1
Naphthalene	91-20-3	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
N-Butyl Methacrylate	97-88-1	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Toluene	108-88-3	Gr. 3: Not classifiable	International Agency for Research on Cancer
Xylene	1330-20-7	Gr. 3: Not classifiable	International Agency for Research on Cancer

Restrictions on the manufacture, placing on the market and use:
The following substance(s) contained in this product is/are subject through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

Ingredient	C.A.S. No.
Toluene	108-88-3
Xylene	1330-20-7

Restriction status: listed in REACH Annex XVII
Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 for Conditions of Restriction

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

DIRECTIVE 2012/18/EU
Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for the application of	
	Lower-tier requirements	Upper-tier requirements
E2 Hazardous to the Aquatic environment	200	500
P5c FLAMMABLE LIQUIDS*	5000	50000

*If maintained at a temperature above its boiling point or if particular processing conditions, such as high pressure or high temperature, may create major-accident hazards, P5a or P5b FLAMMABLE LIQUIDS may apply

Seveso named dangerous substances, Annex 1, Part 2
None

Regulation (EU) No 649/2012
No chemicals listed

SECTION 16: Other information

List of relevant H statements

EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H350i	May cause cancer by inhalation.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Revision information:
Section 03: Composition/ Information of ingredients table information was modified.
Section 03: SCL table information was added.
Section 08: Occupational exposure limit table information was modified.
Section 11: Acute Toxicity table information was modified.
Section 11: Aspiration Hazard Table information was modified.
Section 11: Carcinogenicity Table information was modified.
Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Lactation Table information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Skin Corrosion/Irritation Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Target Organs - Repeated Table information was modified.
Section 11: Target Organs - Single Table information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Mobility in soil information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Section 15: Carcinogenicity information information was modified.

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.

3M Israel SDSs are available at www.3M.com/il