



## Safety Data Sheet

Copyright, 2018, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

<b>Document Group:</b>	20-3048-4	<b>Version Number:</b>	3.00
<b>Revision Date:</b>	20/03/2018	<b>Supersedes Date:</b>	09/02/2017
<b>Transportation version number:</b>			

### 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

##### CLASSIFICATION:

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

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336

Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400

Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

For full text of H phrases, see Section 16.

#### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

**SIGNAL WORD**

Warning

**Symbols:**

GHS02 (Flame) |GHS07 (Exclamation mark) |GHS09 (Environment) |

**Pictograms**



**Ingredients:**

Ingredient	C.A.S. No.	EC No.	% by Wt
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	265-198-5	15 - 40

**HAZARD STATEMENTS:**

H226	Flammable liquid and vapor.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS**

**Prevention:**

P210A	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261A	Avoid breathing vapors.
P273	Avoid release to the environment.

**Response:**

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370 + P378G	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

**Disposal:**

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

**SUPPLEMENTAL INFORMATION**

**Supplemental Hazard Statements:**

EUH208	Contains Oils, orange.   2,3-EPOXYPROPYL NEODECANOATE.   NICKEL SALTS OF NAPHTHENIC ACIDS.   N-Butyl Methacrylate.   d-Limonene. May produce an allergic reaction.
--------	--

38% of the mixture consists of components of unknown acute inhalation toxicity.  
Contains 53% of components with unknown hazards to the aquatic environment.

**Notes on labelling:**

H304 is not required on the label due to the product's viscosity

Nota P applied to CASRN 64742-95-6

**2.3. Other hazards**

None known

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

Ingredient	C.A.S. No.	EC No.	% by Wt	Classification
Acrylic polymers	Trade Secret		15 - 40	Substance not classified as hazardous
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	265-198-5	15 - 40	**Asp. Tox. 1**, H304 **Flam. Liq. 3**, H226; **Skin Irrit. 2**, H315; **STOT SE 3**, H336; **Aquatic Acute 1**, H400,M=1; **Aquatic Chronic 1**, H410,M=1
Pine Oil	8002-09-3		7 - 13	**Skin Irrit. 2**, H315; **Eye Irrit. 2**, H319
Cyclohexanone	108-94-1	203-631-1	5 - 10	**Flam. Liq. 3**, H226; **Acute Tox. 4**, H332 **Acute Tox. 4**, H312; **Acute Tox. 4**, H302; **Skin Irrit. 2**, H315; **Eye Irrit. 2**, H319
1-methoxy-2-propyl acetate	108-65-6	203-603-9	5 - 10	**Flam. Liq. 3**, H226
LIGHT AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-95-6	265-199-0	3 - 7	**Asp. Tox. 1**, H304 - Nota P **Flam. Liq. 3**, H226; **Aquatic Chronic 2**, H411 **Skin Irrit. 2**, H315; **STOT SE 3**, H336
Vinyl polymer (New Jersey Trade Secret Registry # 04499600-5238P)	Trade Secret		1 - 5	Substance not classified as hazardous
Organic pigment (NJ TSR # 04499600-5245P)	Trade Secret		1 - 5	Substance not classified as hazardous
1,2,4-TRIMETHYLBENZENE	95-63-6	202-436-9	1 - 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
Cyasarb UV 3604	79720-19-7	279-242-6	< 0.6	**Skin Corr. 1A**, H314; **Eye Dam. 1**, H318; **STOT SE 3**, H335; **Aquatic Acute 1**, H400,M=10; **Aquatic Chronic 1**, H410,M=10
2,6-DIMETHYL-4-HEPTANONE	108-83-8	203-620-1	< 0.6	**Flam. Liq. 3**, H226; **STOT SE 3**, H335
N-Butyl Methacrylate	97-88-1	202-615-1	< 0.4	**Flam. Liq. 3**, H226; **Skin Irrit. 2**, H315; **Eye Irrit. 2**, H319; **Skin Sens. 1B**, H317; **STOT SE 3**, H335 - Nota D
Oils, orange	8008-57-9		< 0.3	**Flam. Liq. 3**, H226; **Asp.

				Tox. 1**, H304; **Skin Irrit. 2**, H315; **Skin Sens. 1**, H317; **Aquatic Acute 1**, H400,M=1; **Aquatic Chronic 2**, H411
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	247-979-2	< 0.3	**Skin Sens. 1**, H317; **Muta. 2**, H341; **Aquatic Chronic 2**, H411
Naphthenic Acid	1338-24-5	215-662-8	< 0.3	Substance not classified as hazardous
Ethylbenzene	100-41-4	202-849-4	< 0.3	**Flam. Liq. 2**, H225; **Acute Tox. 4**, H332; **Asp. Tox. 1**, H304; **STOT RE 2**, H373 **Aquatic Chronic 3**, H412
Naphthalene	91-20-3	202-049-5	< 0.3	**Acute Tox. 4**, H302; **Carc. 2**, H351; **Aquatic Acute 1**, H400,M=1; **Aquatic Chronic 1**, H410,M=1
Toluene	108-88-3	203-625-9	< 0.3	**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 **Eye Irrit. 2**, H319
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	263-000-1	< 0.2	**Acute Tox. 3**, H301; **Skin Sens. 1**, H317; **Carc. 2**, H351; **Aquatic Acute 1**, H400,M=10; **Aquatic Chronic 1**, H410,M=10
GLYCOLIC ACID, BUTYL ESTER	7397-62-8	230-991-7	< 0.2	**Eye Dam. 1**, H318; **Repr. 2**, H361d; **STOT SE 3**, H335
Cumene	98-82-8	202-704-5	< 0.2	**Flam. Liq. 3**, H226; **Asp. Tox. 1**, H304; **STOT SE 3**, H335; **Aquatic Chronic 2**, H411 - Nota C
d-Limonene	5989-27-5	227-813-5	< 0.2	**Flam. Liq. 3**, H226; **Skin Irrit. 2**, H315; **Skin Sens. 1**, H317; **Aquatic Acute 1**, H400,M=1; **Aquatic Chronic 1**, H410,M=1 - Nota C

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

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

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

**Skin Contact:**

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

**Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

**If Swallowed:**

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

**SECTION 5: Fire-fighting measures**

**5.1. Extinguishing media**

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

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

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

**Hazardous Decomposition or By-Products**

**Substance**

Hydrocarbons  
Carbon monoxide  
Carbon dioxide  
Hydrogen Chloride

**Condition**

During Combustion  
During Combustion  
During Combustion  
During Combustion

**5.3. Advice for fire-fighters**

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust 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. 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 dikes to prevent entry into sewer systems or bodies of water.

**6.3. Methods and material for containment and cleaning up**

Contain spill. 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**

For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/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.

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional Comments</b>
Ethylbenzene	100-41-4	ACGIH	TWA:20 ppm	A3: Confirmed animal carcin.
2,6-DIMETHYL-4-HEPTANONE	108-83-8	ACGIH	TWA:25 ppm	
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin
Cyclohexanone	108-94-1	ACGIH	TWA:20 ppm;STEL:50 ppm	A3: Confirmed animal carcin., SKIN
Naphthalene	91-20-3	ACGIH	TWA:10 ppm	A3: Confirmed animal carcin., SKIN
Benzene, trimethyl-	95-63-6	ACGIH	TWA:25 ppm	
Cumene	98-82-8	ACGIH	TWA:50 ppm	

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

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:

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:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

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

## SECTION 9: Physical and chemical properties

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

<b>Physical state</b>	Liquid
<b>Appearance/Odor</b>	Solvent odor, red, liquid
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Boiling point/boiling range</b>	$\geq 140$ °C
<b>Melting point</b>	<i>Not Applicable</i>
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Explosive properties:</b>	Not Classified
<b>Oxidising properties:</b>	Not Classified
<b>Flash Point</b>	52.2 °C [ <i>Test Method</i> :Closed Cup]
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>

<b>Vapor Pressure</b>	<=493.3 Pa [@ 20 °C ]
<b>Relative Density</b>	0.99 [Ref Std: WATER=1]
<b>Water solubility</b>	No Data Available
<b>Solubility- non-water</b>	No Data Available
<b>Partition coefficient: n-octanol/ water</b>	No Data Available
<b>Evaporation rate</b>	<=0.05 [Ref Std:BUOAC=1]
<b>Vapor Density</b>	No Data Available
<b>Decomposition temperature</b>	No Data Available
<b>Viscosity</b>	1,000 - 1,200 mPa-s
<b>Density</b>	0.99 g/ml

**9.2. Other information**

<b>EU Volatile Organic Compounds</b>	No Data Available
<b>Percent volatile</b>	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**

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

**SECTION 11: Toxicological information**

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

**11.1. Information on Toxicological effects****Signs and Symptoms of Exposure**

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

**Inhalation:**

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:**

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:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

**Ingestion:**

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.

**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 >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Dermal	Rabbit	LD50 > 2,000 mg/kg
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Ingestion	Rat	LD50 > 5,000 mg/kg
Pine Oil	Dermal	Rabbit	LD50 > 2,000 mg/kg
Pine Oil	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

**3M™ Process Color 882N Traffic Sign Red**

LIGHT AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Ingestion	Rat	LD50 > 5,000 mg/kg
Vinyl polymer (New Jersey Trade Secret Registry # 04499600-5238P)	Dermal	Rabbit	LD50 > 8,000 mg/kg
Vinyl polymer (New Jersey Trade Secret Registry # 04499600-5238P)	Ingestion	Rat	LD50 > 8,000 mg/kg
Organic pigment (NJ TSR # 04499600-5245P)	Dermal		LD50 estimated to be > 5,000 mg/kg
Organic pigment (NJ TSR # 04499600-5245P)	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
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
2,6-DIMETHYL-4-HEPTANONE	Dermal	Rat	LD50 > 2,000 mg/kg
2,6-DIMETHYL-4-HEPTANONE	Inhalation-Vapor (4 hours)	Rat	LC50 > 5 mg/l
2,6-DIMETHYL-4-HEPTANONE	Ingestion	Rat	LD50 5,265 mg/kg
Cyosorb UV 3604	Dermal	Rabbit	LD50 > 2,000 mg/kg
Cyosorb UV 3604	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5 mg/l
Cyosorb UV 3604	Ingestion	Rat	LD50 > 2,000 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
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
Oils, orange	Inhalation-Vapor (4 hours)	Mouse	LC50 > 3.14 mg/l
Oils, orange	Dermal	Rabbit	LD50 > 5,000 mg/kg
Oils, orange	Ingestion	Rat	LD50 4,400 mg/kg
Ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
Ethylbenzene	Inhalation-Vapor (4 hours)	Rat	LC50 17.4 mg/l
Ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg
2,3-EPOXYPROPYL NEODECANOATE	Dermal	Rat	LD50 > 2,000 mg/kg
2,3-EPOXYPROPYL NEODECANOATE	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
d-Limonene	Inhalation-Vapor (4 hours)	Mouse	LC50 > 3.14 mg/l
d-Limonene	Dermal	Rabbit	LD50 > 5,000 mg/kg
d-Limonene	Ingestion	Rat	LD50 4,400 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 1,400 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
NICKEL SALTS OF NAPHTHENIC ACIDS	Ingestion		LD50 estimated to be 50 - 300 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Rabbit	Irritant
Pine Oil	Not available	Irritant
1-methoxy-2-propyl acetate	Rabbit	No significant irritation
Cyclohexanone	Rabbit	Irritant
LIGHT AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Rabbit	Irritant
Vinyl polymer (New Jersey Trade Secret Registry # 04499600-5238P)	Professional judgement	No significant irritation
1,2,4-TRIMETHYLBENZENE	Rabbit	Irritant
2,6-DIMETHYL-4-HEPTANONE	Rabbit	Minimal irritation
Cyasorb UV 3604	Rabbit	Corrosive
N-Butyl Methacrylate	Rabbit	Irritant
Toluene	Rabbit	Irritant
Oils, orange	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Mild irritant
2,3-EPOXYPROPYL NEODECANOATE	Rabbit	No significant irritation
Naphthalene	Rabbit	Minimal irritation
d-Limonene	Rabbit	Mild irritant
Cumene	Rabbit	Minimal irritation
GLYCOLIC ACID, BUTYL ESTER	Rabbit	No significant irritation
NICKEL SALTS OF NAPHTHENIC ACIDS	Professional judgement	Minimal irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Rabbit	Mild irritant
Pine Oil	Rabbit	Severe irritant
1-methoxy-2-propyl acetate	Rabbit	Mild irritant
Cyclohexanone	Rabbit	Severe irritant
LIGHT AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Rabbit	Mild irritant
Vinyl polymer (New Jersey Trade Secret Registry # 04499600-5238P)	Professional judgement	No significant irritation
1,2,4-TRIMETHYLBENZENE	Rabbit	Mild irritant
2,6-DIMETHYL-4-HEPTANONE	Rabbit	No significant irritation
Cyasorb UV 3604	Rabbit	Corrosive
N-Butyl Methacrylate	Rabbit	Mild irritant
Toluene	Rabbit	Moderate irritant
Oils, orange	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Moderate irritant
2,3-EPOXYPROPYL NEODECANOATE	Rabbit	No significant irritation
Naphthalene	Rabbit	No significant irritation
d-Limonene	Rabbit	Mild irritant
Cumene	Rabbit	Mild irritant
GLYCOLIC ACID, BUTYL ESTER	Rabbit	Corrosive
NICKEL SALTS OF NAPHTHENIC ACIDS	Professional judgement	Mild irritant

**Skin Sensitization**

Name	Species	Value
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Guinea	Not classified

**3M™ Process Color 882N Traffic Sign Red**

	pig	
Pine Oil	Guinea pig	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
1,2,4-TRIMETHYLBENZENE	Guinea pig	Not classified
2,6-DIMETHYL-4-HEPTANONE	Guinea pig	Not classified
N-Butyl Methacrylate	Guinea pig	Sensitizing
Toluene	Guinea pig	Not classified
Oils, orange	Mouse	Sensitizing
Ethylbenzene	Human	Not classified
2,3-EPOXYPROPYL NEODECANOATE	Guinea pig	Sensitizing
d-Limonene	Mouse	Sensitizing
Cumene	Guinea pig	Not classified
GLYCOLIC ACID, BUTYL ESTER	Guinea pig	Not classified
NICKEL SALTS OF NAPHTHENIC ACIDS	similar compounds	Sensitizing

**Respiratory Sensitization**

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

**Germ Cell Mutagenicity**

Name	Route	Value
Pine Oil	In Vitro	Not mutagenic
Pine Oil	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
1,2,4-TRIMETHYLBENZENE	In Vitro	Not mutagenic
2,6-DIMETHYL-4-HEPTANONE	In Vitro	Not mutagenic
Cyasorb UV 3604	In Vitro	Not mutagenic
N-Butyl Methacrylate	In Vitro	Not mutagenic
N-Butyl Methacrylate	In vivo	Not mutagenic
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Oils, orange	In Vitro	Not mutagenic
Oils, orange	In vivo	Not mutagenic
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
2,3-EPOXYPROPYL NEODECANOATE	In Vitro	Some positive data exist, but the data are not sufficient for classification
2,3-EPOXYPROPYL NEODECANOATE	In vivo	Mutagenic
d-Limonene	In Vitro	Not mutagenic
d-Limonene	In vivo	Not mutagenic
Cumene	In Vitro	Not mutagenic
Cumene	In vivo	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
------	-------	---------	-------

**3M™ Process Color 882N Traffic Sign Red**

HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
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
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
Oils, orange	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic
Naphthalene	Inhalation	Multiple animal species	Carcinogenic
d-Limonene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Cumene	Inhalation	Multiple animal species	Carcinogenic
NICKEL SALTS OF NAPHTHENIC ACIDS	Not Specified	similar compounds	Carcinogenic

**Reproductive Toxicity**
**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Pine Oil	Ingestion	Not classified for development	Rat	NOAEL 600 mg/kg/day	during gestation
1-methoxy-2-propyl acetate	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
1-methoxy-2-propyl acetate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
1-methoxy-2-propyl acetate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	prematuring & 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	Inhalation	Not classified for male reproduction	Rat	NOAEL 2 mg/l	2 generation
Cyclohexanone	Ingestion	Not classified for development	Mouse	LOAEL 1,100 mg/kg/day	during organogenesis
Cyclohexanone	Inhalation	Not classified for development	Rat	NOAEL 2 mg/l	2 generation
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
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

**3M™ Process Color 882N Traffic Sign Red**

1,2,4-TRIMETHYLBENZENE	Inhalation	Not classified for development	Rat	NOAEL 1.5 mg/l	during gestation
2,6-DIMETHYL-4-HEPTANONE	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg	prematuring & during gestation
2,6-DIMETHYL-4-HEPTANONE	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	2 weeks
2,6-DIMETHYL-4-HEPTANONE	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
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	prematuring & 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
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
Oils, orange	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	prematuring & during gestation
Oils, orange	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 mg/kg/day	during organogenesis
Ethylbenzene	Inhalation	Not classified for development	Rat	NOAEL 4.3 mg/l	prematuring & during gestation
d-Limonene	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	prematuring & during gestation
d-Limonene	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 mg/kg/day	during organogenesis
Cumene	Inhalation	Not classified for development	Rabbit	NOAEL 11.3 mg/l	during organogenesis
GLYCOLIC ACID, BUTYL ESTER	Ingestion	Toxic to development	Rat	NOAEL 250 mg/kg/day	during organogenesis

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Professional judgement	NOAEL Not available	
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Pine Oil	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Not available	NOAEL Not available	

**3M™ Process Color 882N Traffic Sign Red**

			classification			
Pine Oil	Ingestion	central nervous system depression	Not classified		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	
Cyclohexanone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Guinea pig	LOAEL 16.1 mg/l	6 hours
Cyclohexanone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Cyclohexanone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
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	
2,6-DIMETHYL-4-HEPTANONE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL Not available	
2,6-DIMETHYL-4-HEPTANONE	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	
2,6-DIMETHYL-4-HEPTANONE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL Not available	
Cyasorb UV 3604	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	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 depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Oils, orange	Ingestion	nervous system	Not classified		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	
Ethylbenzene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	

**3M™ Process Color 882N Traffic Sign Red**

Naphthalene	Ingestion	blood	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
d-Limonene	Ingestion	nervous system	Not classified		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
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
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	Not classified	Rabbit	NOAEL 0.76 mg/l	50 days
Cyclohexanone	Ingestion	liver	Not classified	Mouse	NOAEL 4,800 mg/kg/day	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
2,6-DIMETHYL-4-HEPTANONE	Inhalation	liver   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 5.4 mg/l	6 weeks
2,6-DIMETHYL-4-HEPTANONE	Inhalation	blood	Not classified	Rat	NOAEL 5.3 mg/l	9 days
2,6-DIMETHYL-4-HEPTANONE	Inhalation	endocrine system   hematopoietic system	Not classified	Rat	NOAEL 9.6 mg/l	6 weeks
2,6-DIMETHYL-4-HEPTANONE	Ingestion	heart   endocrine system   liver   nervous system	Not classified	Rat	NOAEL 2,000 mg/kg/day	90 days
2,6-DIMETHYL-4-HEPTANONE	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg	90 days
2,6-DIMETHYL-4-HEPTANONE	Ingestion	blood	Not classified	Rat	NOAEL 4,000	3 weeks



**3M™ Process Color 882N Traffic Sign Red**

					mg/kg/day	
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
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
Oils, orange	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 75 mg/kg/day	103 weeks
Oils, orange	Ingestion	liver	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Oils, orange	Ingestion	heart   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   immune system   muscles   nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	103 weeks

**3M™ Process Color 882N Traffic Sign Red**

		respiratory system				
Ethylbenzene	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	2 years
Ethylbenzene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	103 weeks
Ethylbenzene	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 3.4 mg/l	28 days
Ethylbenzene	Inhalation	auditory system	Not classified	Rat	NOAEL 2.4 mg/l	5 days
Ethylbenzene	Inhalation	endocrine system	Not classified	Mouse	NOAEL 3.3 mg/l	103 weeks
Ethylbenzene	Inhalation	gastrointestinal tract	Not classified	Rat	NOAEL 3.3 mg/l	2 years
Ethylbenzene	Inhalation	bone, teeth, nails, and/or hair   muscles	Not classified	Multiple animal species	NOAEL 4.2 mg/l	90 days
Ethylbenzene	Inhalation	heart   immune system   respiratory system	Not classified	Multiple animal species	NOAEL 3.3 mg/l	2 years
Ethylbenzene	Ingestion	liver   kidney and/or bladder	Not classified	Rat	NOAEL 680 mg/kg/day	6 months
2,3-EPOXYPROPYL NEODECANOATE	Ingestion	hematopoietic system   liver	Not classified	Rat	NOAEL 400 mg/kg/day	5 weeks
2,3-EPOXYPROPYL NEODECANOATE	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 40 mg/kg/day	5 weeks
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
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
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	Not classified	Rat	NOAEL 769 mg/kg/day	6 months

**3M™ Process Color 882N Traffic Sign Red**

		hematopoietic system   liver   respiratory system				
GLYCOLIC ACID, BUTYL ESTER	Ingestion	blood   kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 100 mg/kg/day	90 days

**Aspiration Hazard**

Name	Value
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Aspiration hazard
LIGHT AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Aspiration hazard
1,2,4-TRIMETHYLBENZENE	Aspiration hazard
2,6-DIMETHYL-4-HEPTANONE	Some positive data exist, but the data are not sufficient for classification
Toluene	Aspiration hazard
Oils, orange	Aspiration hazard
Ethylbenzene	Aspiration hazard
d-Limonene	Aspiration hazard
Cumene	Aspiration hazard

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

**SECTION 12: Ecological information**

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

**12.1. Toxicity**

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Water flea	Experimental	48 hours	Effect Concentration 50%	0.95 mg/l
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	2.34 mg/l
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Green Algae	Experimental	96 hours	Inhibitory Concentration 50%	4.2 mg/l
Pine Oil	8002-09-3		Data not available or insufficient for classification			
1-methoxy-2-propyl acetate	108-65-6	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	134 mg/l
1-methoxy-2-propyl acetate	108-65-6	Water flea	Experimental	48 hours	Effect Concentration 50%	370 mg/l
1-methoxy-2-propyl acetate	108-65-6	Green algae	Experimental	72 hours	Effect Concentration 50%	>1,000 mg/l
1-methoxy-2-propyl acetate	108-65-6	Green algae	Experimental	72 hours	No obs Effect Conc	1,000 mg/l
1-methoxy-2-propyl acetate	108-65-6	Water flea	Experimental	21 days	No obs Effect Conc	100 mg/l
Cyclohexanone	108-94-1	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	527 mg/l
Cyclohexanone	108-94-1	Water flea	Experimental	24 hours	Effect Concentration 50%	800 mg/l
Cyclohexanone	108-94-1	Algae	Experimental	72 hours	Effect Concentration 50%	32.9 mg/l

**3M™ Process Color 882N Traffic Sign Red**

Cyclohexanone	108-94-1	Algae	Experimental	72 hours	Effect Concentration 10%	3.56 mg/l
LIGHT AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-95-6		Data not available or insufficient for classification			
1,2,4-TRIMETHYLBENZENE	95-63-6	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	7.72 mg/l
1,2,4-TRIMETHYLBENZENE	95-63-6	Water flea	Experimental	48 hours	Effect Concentration 50%	3.6 mg/l
1,2,4-TRIMETHYLBENZENE	95-63-6	Mysid Shrimp	Experimental	96 hours	Lethal Concentration 50%	2 mg/l
Organic pigment (NJ TSR # 04499600-5245P)	Trade Secret	Golden Orfe	Experimental	96 hours	Lethal Concentration 50%	>10,000 mg/l
Organic pigment (NJ TSR # 04499600-5245P)	Trade Secret	Water flea	Experimental	48 hours	Effect Concentration 50%	>100 mg/l
Organic pigment (NJ TSR # 04499600-5245P)	Trade Secret	Green Algae	Experimental	72 hours	Effect Concentration 50%	>100 mg/l
Organic pigment (NJ TSR # 04499600-5245P)	Trade Secret	Green Algae	Experimental	72 hours	Effect Concentration 50%	100 mg/l
Vinyl polymer (New Jersey Trade Secret Registry # 04499600-5238P)	Trade Secret		Data not available or insufficient for classification			
2,6-DIMETHYL-4-HEPTANONE	108-83-8	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	30 mg/l
2,6-DIMETHYL-4-HEPTANONE	108-83-8	Green Algae	Experimental	72 hours	Effect Concentration 50%	46.9 mg/l
2,6-DIMETHYL-4-HEPTANONE	108-83-8	Water flea	Experimental	48 hours	Effect Concentration 50%	37.2 mg/l
2,6-DIMETHYL-4-HEPTANONE	108-83-8	Green Algae	Experimental	72 hours	No obs Effect Conc	3.55 mg/l
Cyasorb UV 3604	79720-19-7	Common Carp	Experimental	96 hours	Lethal Concentration 50%	0.097 mg/l
N-Butyl Methacrylate	97-88-1	Water flea	Experimental	48 hours	Effect Concentration 50%	25 mg/l
N-Butyl Methacrylate	97-88-1	Green Algae	Experimental	72 hours	Effect Concentration 50%	31.2 mg/l
N-Butyl Methacrylate	97-88-1	Ricefish	Experimental	96 hours	Lethal Concentration 50%	5.6 mg/l
N-Butyl Methacrylate	97-88-1	Water flea	Experimental	21 days	No obs Effect Conc	1.1 mg/l
N-Butyl Methacrylate	97-88-1	Green Algae	Experimental	72 hours	No obs Effect Conc	24.8 mg/l
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Water flea	Experimental	48 hours	Effect Concentration 50%	4.8 mg/l
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Green Algae	Experimental	72 hours	Effect Concentration 50%	2.9 mg/l
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	5 mg/l
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Green algae	Experimental	96 hours	No obs Effect Conc	1 mg/l
Ethylbenzene	100-41-4	Water flea	Experimental	48 hours	Effect Concentration 50%	1.8 mg/l
Ethylbenzene	100-41-4	Green Algae	Experimental	96 hours	Effect Concentration 50%	3.6 mg/l
Ethylbenzene	100-41-4	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	4.2 mg/l
Ethylbenzene	100-41-4	Atlantic Silverside	Experimental	96 hours	Lethal Concentration 50%	5.1 mg/l

**3M™ Process Color 882N Traffic Sign Red**

Ethylbenzene	100-41-4	Mysid Shrimp	Experimental	96 hours	Lethal Concentration 50%	2.6 mg/l
Ethylbenzene	100-41-4	Water flea	Experimental	7 days	No obs Effect Conc	0.96 mg/l
Naphthalene	91-20-3	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	0.11 mg/l
Naphthalene	91-20-3	Water flea	Experimental	48 hours	Effect Concentration 50%	1.6 mg/l
Naphthalene	91-20-3	Diatom	Experimental	72 hours	Effect Concentration 50%	0.4 mg/l
Naphthalene	91-20-3	Fish other	Experimental	40 days	No obs Effect Conc	0.12 mg/l
Naphthenic Acid	1338-24-5		Data not available or insufficient for classification			
Oils, orange	8008-57-9	Fathead Minnow	Estimated	96 hours	Lethal Concentration 50%	0.702 mg/l
Oils, orange	8008-57-9	Water flea	Estimated	48 hours	Effect Concentration 50%	0.307 mg/l
Oils, orange	8008-57-9	Green algae	Estimated	72 hours	Effect Concentration 50%	0.32 mg/l
Oils, orange	8008-57-9	Green algae	Estimated	72 hours	Effect Concentration 10%	0.174 mg/l
Oils, orange	8008-57-9	Water flea	Estimated	21 days	No obs Effect Conc	0.08 mg/l
Oils, orange	8008-57-9	Fathead Minnow	Estimated	8 days	No obs Effect Conc	0.059 mg/l
Toluene	108-88-3	Fish other	Experimental	96 hours	Lethal Concentration 50%	6.41 mg/l
Toluene	108-88-3	Coho Salmon	Experimental	96 hours	Lethal Concentration 50%	5.5 mg/l
Toluene	108-88-3	Water flea	Experimental	48 hours	Effect Concentration 50%	3.78 mg/l
Toluene	108-88-3	Green Algae	Experimental	72 hours	Effect Concentration 50%	12.5 mg/l
Toluene	108-88-3	Coho salmon	Experimental	40 days	No obs Effect Conc	1.39 mg/l
Toluene	108-88-3	Water flea	Experimental	7 days	No obs Effect Conc	0.74 mg/l
Cumene	98-82-8	Green algae	Experimental	72 hours	Effect Concentration 50%	2.6 mg/l
Cumene	98-82-8	Mysid Shrimp	Experimental	96 hours	Effect Concentration 50%	1.3 mg/l
Cumene	98-82-8	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	4.8 mg/l
Cumene	98-82-8	Water flea	Experimental	21 days	No obs Effect Conc	0.35 mg/l
Cumene	98-82-8	Green algae	Experimental	72 hours	No obs Effect Conc	0.22 mg/l
d-Limonene	5989-27-5	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	0.702 mg/l
d-Limonene	5989-27-5	Green Algae	Experimental	72 hours	Effect Concentration 50%	0.32 mg/l
d-Limonene	5989-27-5	Water flea	Experimental	48 hours	Effect Concentration 50%	0.307 mg/l
d-Limonene	5989-27-5	Water flea	Experimental	21 days	No obs Effect Conc	0.08 mg/l
d-Limonene	5989-27-5	Green Algae	Experimental	72 hours	Effect Concentration 10%	0.174 mg/l
GLYCOLIC ACID, BUTYL ESTER	7397-62-8	Water flea	Experimental	24 hours	Effect Concentration 50%	280 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Common Carp	Estimated	96 hours	Lethal Concentration 50%	6.9 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Green Algae	Estimated	96 hours	Effect Concentration 50%	0.034 mg/l
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Water flea	Estimated	48 hours	Effect Concentration 50%	0.069 mg/l

## 12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Estimated Photolysis		Photolytic half-life (in air)	2.1 days (t 1/2)	Other methods
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Experimental Biodegradation	28 days	Biological Oxygen Demand	39 % weight	OECD 301D - Closed Bottle Test
Pine Oil	8002-09-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1-methoxy-2-propyl acetate	108-65-6	Experimental Biodegradation	28 days	Biological Oxygen Demand	87.2 % BOD/ThBOD	OECD 301C - MITI (I)
Cyclohexanone	108-94-1	Experimental Biodegradation	14 days	Biological Oxygen Demand	87 % BOD/ThBOD	OECD 301C - MITI (I)
LIGHT AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-95-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,2,4-TRIMETHYLBENZENE	95-63-6	Experimental Biodegradation	28 days	Biological Oxygen Demand	>60 % weight	OECD 301F - Manometric Respiro
1,2,4-TRIMETHYLBENZENE	95-63-6	Experimental Photolysis		Photolytic half-life (in air)	11.8 hours (t 1/2)	Other methods
Organic pigment (NJ TSR # 04499600-5245P)	Trade Secret	Experimental Biodegradation	28 days	Biological Oxygen Demand	0-10 % BOD/ThBOD	OECD 301F - Manometric Respiro
Vinyl polymer (New Jersey Trade Secret Registry # 04499600-5238P)	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,6-DIMETHYL-4-HEPTANONE	108-83-8	Experimental Biodegradation	20 days	Biological Oxygen Demand	88 % BOD/ThBOD	Other methods
Cyasorb UV 3604	79720-19-7	Experimental Biodegradation	28 days	Carbon dioxide evolution	0 % weight	OECD 301B - Mod. Sturm or CO2
N-Butyl Methacrylate	97-88-1	Experimental Biodegradation	28 days	Biological Oxygen Demand	88 % BOD/ThBOD	OECD 301C - MITI (I)
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Experimental Hydrolysis		Half-life (t 1/2)	9.9 days (t 1/2)	Other methods
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Experimental Biodegradation	28 days	Biological Oxygen Demand	11.6 % weight	OECD 301F - Manometric Respiro
Ethylbenzene	100-41-4	Experimental Biodegradation	28 days	Carbon dioxide evolution	70-80 % weight	Other methods
Ethylbenzene	100-41-4	Experimental Photolysis		Photolytic half-life (in air)	4.26 days (t 1/2)	Other methods
Naphthalene	91-20-3	Experimental Biodegradation	28 days	Biological Oxygen Demand	>74 % BOD/ThBOD	OECD 301C - MITI (I)
Naphthenic Acid	1338-24-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Oils, orange	8008-57-9	Estimated Biodegradation	14 days	Biological Oxygen Demand	98 % BOD/ThBOD	OECD 301C - MITI (I)
Oils, orange	8008-57-9	Estimated Photolysis		Photolytic half-life (in air)	2.5 hours (t 1/2)	Other methods
Toluene	108-88-3	Experimental Photolysis		Photolytic half-life (in air)	5.2 days (t 1/2)	Other methods
Toluene	108-88-3	Experimental Biodegradation	20 days	Biological Oxygen Demand	80 % weight	
Cumene	98-82-8	Experimental Biodegradation	14 days	Biological Oxygen Demand	33 % weight	OECD 301C - MITI (I)
Cumene	98-82-8	Experimental Photolysis		Photolytic half-life (in air)	4.5 days (t 1/2)	Other methods
d-Limonene	5989-27-5	Experimental Biodegradation	14 days	Biological Oxygen Demand	98 % BOD/ThBOD	OECD 301C - MITI (I)
GLYCOLIC ACID, BUTYL ESTER	7397-62-8	Experimental Biodegradation	28 days	Carbon dioxide evolution	81 % weight	OECD 301B - Mod. Sturm or CO2
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Data not available or insufficient for	N/A	N/A	N/A	N/A

		classification				
--	--	----------------	--	--	--	--

### 12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	6.1	Other methods
Pine Oil	8002-09-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1-methoxy-2-propyl acetate	108-65-6	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.36	Other methods
Cyclohexanone	108-94-1	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.86	Other methods
LIGHT AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-95-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,2,4-TRIMETHYLBENZENE	95-63-6	Experimental BCF-Carp	56 days	Bioaccumulation Factor	≤275	OECD 305E-Bioaccum Fl-thru fis
Organic pigment (NJ TSR # 04499600-5245P)	Trade Secret	Estimated Bioconcentration		Bioaccumulation Factor	6.8	Est: Bioconcentration factor
Vinyl polymer (New Jersey Trade Secret Registry # 04499600-5238P)	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,6-DIMETHYL-4-HEPTANONE	108-83-8	Estimated Bioconcentration		Bioaccumulation Factor	3.7	Est: Bioconcentration factor
Cyasorb UV 3604	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 Bioconcentration		Log of Octanol/H2O part. coeff	2.88	Other methods
2,3-EPOXYPROPYL NEODECANOATE	26761-45-5	Estimated Bioconcentration		Bioaccumulation Factor	28	Est: Bioconcentration factor
Ethylbenzene	100-41-4	Experimental BCF - Other	42 days	Bioaccumulation Factor	1	Other methods
Naphthalene	91-20-3	Experimental BCF-Carp	56 days	Bioaccumulation Factor	36.5-168	OECD 305E-Bioaccum Fl-thru fis
Naphthenic Acid	1338-24-5	Experimental BCF - Rainbow Tr	10 days	Bioaccumulation Factor	4	Other methods
Oils, orange	8008-57-9	Estimated Bioconcentration		Bioaccumulation Factor	2100	Other methods
Toluene	108-88-3	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	2.73	Other methods
Cumene	98-82-8	Estimated Bioconcentration		Bioaccumulation Factor	140	Other methods
d-Limonene	5989-27-5	Estimated Bioconcentration		Bioaccumulation Factor	2100	Est: Bioconcentration factor
GLYCOLIC ACID, BUTYL ESTER	7397-62-8	Estimated Bioconcentration		Bioaccumulation Factor	2.8	Est: Bioconcentration factor
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. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

**12.6. Other adverse effects**

No information available

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

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

Incinerate in a permitted waste incineration facility. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/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**

ADR: UN1210; Printing Ink; 3; III; (E); F1.

IMDG: UN1210; Printing Ink, (Heavy Aromatic Solvent Naphtha (Petroleum) And Oils, Orange); 3; III; EMS: FE, SD;

Marine Pollutant: Heavy Aromatic Solvent Naphtha (Petroleum) And Oils, Orange.

IATA: UN1210; Printing Ink; 3; III.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Carcinogenicity**

<b><u>Ingredient</u></b>	<b><u>C.A.S. No.</u></b>	<b><u>Classification</u></b>	<b><u>Regulation</u></b>
NICKEL SALTS OF NAPHTHENIC ACIDS	61788-71-4	Carc. 2	3M classified according to Regulation (EC) No 1272/2008
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
d-Limonene	5989-27-5	Gr. 3: Not classifiable	International Agency for Research on Cancer
Cumene	98-82-8	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Naphthalene	91-20-3	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
Toluene	108-88-3	Gr. 3: Not classifiable	International Agency for Research on Cancer
Naphthalene	91-20-3	Carc. 2	Regulation (EC) No.



**Global inventory status**

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

**SECTION 16: Other information****List of relevant H statements**

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H301	Toxic if swallowed.
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.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**Revision information:**

Section 02: CLP Ingredient table information was modified.  
Section 02: Label Elements: CLP Percent Unknown information was modified.  
Section 02: List of sensitizers information was modified.  
Section 03: Composition/ Information of ingredients table information was modified.  
Section 05: Fire - Advice for fire fighters information information was modified.  
Section 06: Accidental release clean-up information information was modified.  
Section 07: Conditions safe storage information was modified.  
Section 08: Occupational exposure limit table information was modified.  
Section 09: Evaporation Rate information information was modified.  
Section 09: Flash point information information was modified.  
Section 09: Property description for optional properties information was modified.  
Section 09: Relative density information information was modified.  
Section 09: Vapor pressure value 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: Health Effects - Inhalation information information was modified.  
Section 11: Health Effects - Skin information 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: Persistence and Degradability information information was modified.  
Section 12: Biocumulative potential information information was modified.  
Section 13: Standard Phrase Category Waste GHS information was modified.  
Section 15: Carcinogenicity information information was modified.  
Section 16: Two-column table displaying the unique list of H Codes and statements (std phrses) for all components of the given material. 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](http://www.3M.com/il)**