# Safety Data Sheet

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## SECTION 1: Identification

**1.1. Product identifier**
3M™ Roll Coat Color 4976C Transparent Magenta

**Product Identification Numbers**
42-0023-8222-6, 75-0301-8627-6
7010390507

**1.2. Recommended use and restrictions on use**

**Recommended use**
Roll Coat

**1.3. Supplier's details**

| | |
|---|---|
| **MANUFACTURER:** | 3M |
| **DIVISION:** | Commercial Branding and Transportation Division |
| **ADDRESS:** | 3M Center, St. Paul, MN 55144-1000, USA |
| **Telephone:** | 1-888-3M HELPS (1-888-364-3577) |

**1.4. Emergency telephone number**
1-800-364-3577 or (651) 737-6501 (24 hours)

## SECTION 2: Hazard identification

**2.1. Hazard classification**
Flammable Liquid: Category 3.
Serious Eye Damage/Irritation: Category 1.
Skin Corrosion/Irritation: Category 2.
Skin Sensitizer: Category 1A.
Reproductive Toxicity: Category 2.
Carcinogenicity: Category 1A.
Specific Target Organ Toxicity (single exposure): Category 1.
Specific Target Organ Toxicity (single exposure): Category 3.
Specific Target Organ Toxicity (repeated exposure): Category 1.

**2.2. Label elements**
**Signal word**
Danger

**Symbols**
Flame | Corrosion | Exclamation mark | Health Hazard |

**Pictograms**



**Hazard Statements**
Flammable liquid and vapor.

Causes serious eye damage.
Causes skin irritation.
May cause an allergic skin reaction.
May cause drowsiness or dizziness.
Suspected of damaging fertility or the unborn child.
May cause cancer.

Causes damage to organs:
sensory organs |

Causes damage to organs through prolonged or repeated exposure:
nervous system |

May cause damage to organs through prolonged or repeated exposure:
sensory organs |

**Precautionary Statements**

**Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Keep container tightly closed.
Use explosion-proof electrical/ventilating/lighting equipment.
Do not breathe dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves and eye/face protection.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.

**Response:**
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.

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

**Storage:**
Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store locked up.

**Disposal:**
Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

19% of the mixture consists of ingredients of unknown acute oral toxicity.
19% of the mixture consists of ingredients of unknown acute dermal toxicity.
19% of the mixture consists of ingredients of unknown acute inhalation toxicity.

## SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|---|---|---|
| 1-Methoxy-2-propyl acetate | 108-65-6 | 10 - 30 Trade Secret * |
| Cyclohexanone | 108-94-1 | 10 - 30 Trade Secret * |
| Oligomer 17171 | Trade Secret* | 10 - 30 Trade Secret * |
| Heavy aromatic solvent naphtha (Petroleum) | 64742-94-5 | 7 - 20 Trade Secret * |
| Alkyl amine polymer (New Jersey Trade Secret Registry # 04499600-5252P) | Trade Secret* | 7 - 13 Trade Secret * |
| Organic pigment (NJ TSR # 04499600-5229P) | Trade Secret* | 3 - 10 Trade Secret * |
| Vinyl polymer (NJ TSR # 04499600-5238P) | Trade Secret* | 3 - 10 Trade Secret * |
| Butyl alcohol | 71-36-3 | 1 - 5 Trade Secret * |
| Light aromatic solvent naphtha (Petroleum) | 64742-95-6 | 1 - 5 Trade Secret * |
| Xylene | 1330-20-7 | 1 - 5 Trade Secret * |
| 1,2,4-Trimethylbenzene | 95-63-6 | 0.1 - 2 Trade Secret * |
| Diethylene glycol butyl ether | 112-34-5 | 0.1 - 2 Trade Secret * |
| Trace chemicals and additives | Trade Secret* | 0.1 - 1.5 Trade Secret * |
| 2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with 2-methyl-1,3-benzenediamine and sodium methoxide | 106276-79-3 | < 0.9 Trade Secret * |
| 2,3-Epoxypropyl neodecanoate | 26761-45-5 | < 0.6 Trade Secret * |
| Ethylbenzene | 100-41-4 | < 0.6 Trade Secret * |
| Cumene | 98-82-8 | < 0.5 Trade Secret * |
| Diethylaminoethanol | 100-37-8 | < 0.5 Trade Secret * |
| Napthalene | 91-20-3 | < 0.4 Trade Secret * |
| Formaldehyde | 50-00-0 | < 0.2 Trade Secret * |
| Methyl alcohol | 67-56-1 | < 0.2 Trade Secret * |
| Naphthenic acid | 1338-24-5 | < 0.02 Trade Secret * |
| Benzo(a)pyrene | 50-32-8 | < 0.0009 Trade Secret * |

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## SECTION 4: First aid measures

**4.1. Description of first aid measures**

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

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

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

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

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

Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness). Target organ effects. See Section 11 for additional details. Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

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

## SECTION 5: Fire-fighting measures

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

**5.2. Special hazards arising from the substance or mixture**
Closed containers exposed to heat from fire may build pressure and explode.

**Hazardous Decomposition or By-Products**

| Substance | Condition |
|---|---|
| Hydrocarbons | During Combustion |
| Carbon monoxide | During Combustion |
| Carbon dioxide | During Combustion |
| Hydrogen Chloride | During Combustion |
| Oxides of Nitrogen | During Combustion |

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

## 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. Cover spill area with a fire-extinguishing foam. 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.

## SECTION 7: Handling and storage

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

## 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 |
|---|---|---|---|---|
| Diethylaminoethanol | 100-37-8 | ACGIH | TWA:2 ppm | Danger of cutaneous absorption |
| Diethylaminoethanol | 100-37-8 | OSHA | TWA:50 mg/m3(10 ppm) | SKIN |
| Ethylbenzene | 100-41-4 | ACGIH | TWA:20 ppm | A3: Confirmed animal carcin., Ototoxicant |
| Ethylbenzene | 100-41-4 | OSHA | TWA:435 mg/m3(100 ppm) | |
| 1-Methoxy-2-propyl acetate | 108-65-6 | AIHA | TWA:50 ppm | |
| Cyclohexanone | 108-94-1 | ACGIH | TWA:20 ppm;STEL:50 ppm | A3: Confirmed animal carcin., Danger of cutaneous absorption |
| Cyclohexanone | 108-94-1 | OSHA | TWA:200 mg/m3(50 ppm) | |
| Diethylene glycol butyl ether | 112-34-5 | ACGIH | TWA(inhalable fraction and vapor):10 ppm | |
| Xylene | 1330-20-7 | ACGIH | TWA:20 ppm | A4: Not class. as human carcin |

| | | | | |
|---|---|---|---|---|
| Xylene | 1330-20-7 | OSHA | TWA:435 mg/m3(100 ppm) | |
| Formaldehyde | 50-00-0 | ACGIH | TWA:0.1 ppm;STEL:0.3 ppm | A1: Confirmed human carcin., Dermal/Respiratory Sensitizer |
| Formaldehyde | 50-00-0 | OSHA | TWA:0.75 ppm;STEL:2 ppm | 29 CFR 1910.1048 |
| Benzo(a)pyrene | 50-32-8 | ACGIH | Limit value not established: | A2: Suspected human carcin., Cntrl all exposr-low as possib |
| Methyl alcohol | 67-56-1 | ACGIH | TWA:200 ppm;STEL:250 ppm | Danger of cutaneous absorption |
| Methyl alcohol | 67-56-1 | OSHA | TWA:260 mg/m3(200 ppm) | |
| Butyl alcohol | 71-36-3 | ACGIH | TWA:20 ppm | |
| Butyl alcohol | 71-36-3 | OSHA | TWA:300 mg/m3(100 ppm) | |
| Napthalene | 91-20-3 | ACGIH | TWA:10 ppm | A3: Confirmed animal carcin., Danger of cutaneous absorption |
| Napthalene | 91-20-3 | OSHA | TWA:50 mg/m3(10 ppm) | |
| 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. |
| Cumene | 98-82-8 | OSHA | TWA:245 mg/m3(50 ppm) | SKIN |

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
OSHA : United States Department of Labor - Occupational Safety and Health Administration
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:
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:
Half facepiece or full facepiece air-purifying respirator suitable for formaldehyde
Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates
Half facepiece or full facepiece supplied-air respirator
Organic vapor cartridges may have short service life.

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**

| | |
|---|---|
| **Appearance** | |
| **Physical state** | Liquid |
| **Color** | Magenta |
| **Specific Physical Form:** | Liquid |
| **Odor** | Solvent |
| **Odor threshold** | *No Data Available* |
| **pH** | *Not Applicable* |
| **Melting point** | *Not Applicable* |
| **Boiling Point** | >=243 ºF |
| **Flash Point** | 105 ºF [*Test Method:*Tagliabue Closed Cup] |
| **Evaporation rate** | 0.23 - 1 [*Ref Std:*BUOAC=1] |
| **Flammability (solid, gas)** | Not Applicable |
| **Flammable Limits(LEL)** | 0.9 % |
| **Flammable Limits(UEL)** | 11.7 % |
| **Vapor Pressure** | <=5.1 mmHg [@ 68 ºF] |
| **Vapor Density** | 2.6 - 4.8 [*Ref Std:*AIR=1] |
| **Density** | 0.87 - 0.9 g/ml [@ 20 ºC] |
| **Specific Gravity** | 0.87 - 0.9 [*Ref Std:*WATER=1] |
| **Solubility in Water** | Negligible |
| **Solubility- non-water** | *No Data Available* |
| **Partition coefficient: n-octanol/ water** | *No Data Available* |
| **Autoignition temperature** | 670 - 870 ºF |
| **Decomposition temperature** | *No Data Available* |
| **Viscosity** | 2,000 - 3,000 centipoise |
| **Volatile Organic Compounds** | 600 - 700 g/l |
| **Percent volatile** | 60.00 % 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 be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.**

**11.1. Information on Toxicological effects**

**Signs and Symptoms of Exposure**

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

**Inhalation:**
May be harmful if inhaled.
Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

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

May cause additional health effects (see below).

**Skin Contact:**
May be harmful in contact with skin.
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:**
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:**
Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

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

**Prolonged or repeated exposure may cause target organ effects:**
Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

**Reproductive/Developmental Toxicity:**
Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

**Carcinogenicity:**
Contains a chemical or chemicals which can cause cancer.

| Ingredient | CAS No. | Class Description | Regulation |
|---|---|---|---|
| Benzo[a]pyrene | 50-32-8 | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |
| Benzo[a]pyrene | 50-32-8 | Anticipated human carcinogen | National Toxicology Program Carcinogens |
| Cumene | 98-82-8 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |
| Cumene | 98-82-8 | Anticipated human carcinogen | National Toxicology Program Carcinogens |
| Ethylbenzene | 100-41-4 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |
| Formaldehyde | 50-00-0 | Known To Be Human Carcinogen. | National Toxicology Program Carcinogens |
| Formaldehyde | 50-00-0 | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |
| FORMALDEHYDE | 50-00-0 | Cancer hazard | OSHA Carcinogens |
| Naphthalene | 91-20-3 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |
| Naphthalene | 91-20-3 | Anticipated human carcinogen | National Toxicology Program Carcinogens |

**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 >2,000 - =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 >5,000 mg/kg |
| Heavy aromatic solvent naphtha (Petroleum) | Inhalation-Vapor | Professional judgement | LC50 estimated to be 20 - 50 mg/l |
| Heavy aromatic solvent naphtha (Petroleum) | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| Heavy aromatic solvent naphtha (Petroleum) | Ingestion | Rat | LD50 > 5,000 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 |
| Alkyl amine polymer (New Jersey Trade Secret Registry # 04499600-5252P) | Dermal | Rabbit | LD50 10,960 mg/kg |
| Alkyl amine polymer (New Jersey Trade Secret Registry # | Ingestion | Rat | LD50 13,480 mg/kg |

| | | | |
|---|---|---|---|
| 04499600-5252P) | | | |
| Organic pigment (NJ TSR # 04499600-5229P) | Ingestion | Rat | LD50 > 11,000 mg/kg |
| Organic pigment (NJ TSR # 04499600-5229P) | Dermal | similar compounds | LD50 > 2,000 mg/kg |
| Organic pigment (NJ TSR # 04499600-5229P) | Inhalation-Dust/Mist (4 hours) | similar compounds | LC50 > 3.1 mg/l |
| Vinyl polymer (NJ TSR # 04499600-5238P) | Dermal | Rabbit | LD50 > 8,000 mg/kg |
| Vinyl polymer (NJ TSR # 04499600-5238P) | Ingestion | Rat | LD50 > 8,000 mg/kg |
| Light aromatic solvent naphtha (Petroleum) | Dermal | Rabbit | LD50 > 3,160 mg/kg |
| Light aromatic solvent naphtha (Petroleum) | Inhalation-Vapor (4 hours) | Rat | LC50 > 6.2 mg/l |
| Light aromatic solvent naphtha (Petroleum) | Ingestion | Rat | LD50 3,492 mg/kg |
| Butyl alcohol | Dermal | Rabbit | LD50 3,402 mg/kg |
| Butyl alcohol | Inhalation-Vapor (4 hours) | Rat | LC50 24 mg/l |
| Butyl alcohol | Ingestion | Rat | LD50 2,290 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 |
| Diethylene glycol butyl ether | Dermal | Rabbit | LD50 2,764 mg/kg |
| Diethylene glycol butyl ether | Ingestion | Rat | LD50 7,292 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 |
| 2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with 2-methyl-1,3-benzenediamine and sodium methoxide | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 1.04 mg/l |
| 2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with 2-methyl-1,3-benzenediamine and sodium methoxide | Ingestion | Rat | LD50 > 5,000 mg/kg |
| 2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with 2-methyl-1,3-benzenediamine and sodium methoxide | Dermal | similar health hazards | LD50 estimated to be > 5,000 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 |
| Diethylaminoethanol | Dermal | Rabbit | LD50 880 mg/kg |
| Diethylaminoethanol | Inhalation-Vapor (4 hours) | Rat | LC50 4.5 mg/l |
| Diethylaminoethanol | Ingestion | Rat | LD50 1,300 mg/kg |
| 2,3-Epoxypropyl neodecanoate | Dermal | Rat | LD50 > 2,000 mg/kg |
| 2,3-Epoxypropyl neodecanoate | Ingestion | Rat | LD50 > 2,000 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 |
| Napthalene | Dermal | Human | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Napthalene | Inhalation-Vapor | Human | LC50 estimated to be 20 - 50 mg/l |
| Napthalene | Ingestion | Human | LD50 estimated to be 300 - 2,000 mg/kg |
| Methyl alcohol | Dermal | | LD50 estimated to be 1,000 - 2,000 mg/kg |
| Methyl alcohol | Inhalation-Vapor | | LC50 estimated to be 10 - 20 mg/l |
| Methyl alcohol | Ingestion | | LD50 estimated to be 50 - 300 mg/kg |

| | | | |
|---|---|---|---|
| Formaldehyde | Dermal | Rabbit | LD50 270 mg/kg |
| Formaldehyde | Inhalation-Gas (4 hours) | Rat | LC50 470 ppm |
| Formaldehyde | Ingestion | Rat | LD50 800 mg/kg |
| Naphthenic acid | Dermal | Rabbit | LD50 > 20,000 mg/kg |
| Naphthenic acid | Ingestion | Rat | LD50 5,880 mg/kg |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name | Species | Value |
|---|---|---|
| Heavy aromatic solvent naphtha (Petroleum) | Rabbit | Minimal irritation |
| 1-Methoxy-2-propyl acetate | Rabbit | No significant irritation |
| Cyclohexanone | Rabbit | Irritant |
| Alkyl amine polymer (New Jersey Trade Secret Registry # 04499600-5252P) | Rabbit | Mild irritant |
| Organic pigment (NJ TSR # 04499600-5229P) | Rabbit | No significant irritation |
| Vinyl polymer (NJ TSR # 04499600-5238P) | Professional judgement | No significant irritation |
| Light aromatic solvent naphtha (Petroleum) | Rabbit | Mild irritant |
| Butyl alcohol | Rabbit | Mild irritant |
| Xylene | Rabbit | Mild irritant |
| Diethylene glycol butyl ether | Rabbit | Minimal irritation |
| 1,2,4-Trimethylbenzene | Rabbit | Irritant |
| 2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with 2-methyl-1,3-benzenediamine and sodium methoxide | Rabbit | No significant irritation |
| Ethylbenzene | Rabbit | Mild irritant |
| Diethylaminoethanol | Rabbit | Corrosive |
| 2,3-Epoxypropyl neodecanoate | Rabbit | No significant irritation |
| Cumene | Rabbit | Minimal irritation |
| Napthalene | Rabbit | Minimal irritation |
| Methyl alcohol | Rabbit | Mild irritant |
| Formaldehyde | official classification | Corrosive |
| Naphthenic acid | Rabbit | Mild irritant |

**Serious Eye Damage/Irritation**

| Name | Species | Value |
|---|---|---|
| Heavy aromatic solvent naphtha (Petroleum) | Rabbit | Mild irritant |
| 1-Methoxy-2-propyl acetate | Rabbit | Mild irritant |
| Cyclohexanone | In vitro data | Corrosive |
| Alkyl amine polymer (New Jersey Trade Secret Registry # 04499600-5252P) | Rabbit | No significant irritation |
| Organic pigment (NJ TSR # 04499600-5229P) | Rabbit | No significant irritation |
| Vinyl polymer (NJ TSR # 04499600-5238P) | Professional judgement | No significant irritation |
| Light aromatic solvent naphtha (Petroleum) | Rabbit | Mild irritant |
| Butyl alcohol | Rabbit | Severe irritant |
| Xylene | Rabbit | Mild irritant |
| Diethylene glycol butyl ether | Rabbit | Corrosive |
| 1,2,4-Trimethylbenzene | Rabbit | Mild irritant |
| 2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with 2-methyl-1,3-benzenediamine and sodium methoxide | Rabbit | No significant irritation |
| Ethylbenzene | Rabbit | Moderate irritant |
| Diethylaminoethanol | Rabbit | Corrosive |
| 2,3-Epoxypropyl neodecanoate | Rabbit | No significant irritation |
| Cumene | Rabbit | Mild irritant |
| Napthalene | Rabbit | No significant irritation |

| | | |
|---|---|---|
| Methyl alcohol | Rabbit | Moderate irritant |
| Formaldehyde | official classification | Corrosive |
| Naphthenic acid | Rabbit | Moderate irritant |

## Skin Sensitization

| Name | Species | Value |
|---|---|---|
| Heavy aromatic solvent naphtha (Petroleum) | Guinea pig | Not classified |
| 1-Methoxy-2-propyl acetate | Guinea pig | Not classified |
| Cyclohexanone | Guinea pig | Not classified |
| Organic pigment (NJ TSR # 04499600-5229P) | Multiple animal species | Not classified |
| Light aromatic solvent naphtha (Petroleum) | Guinea pig | Not classified |
| Butyl alcohol | Human | Not classified |
| 1,2,4-Trimethylbenzene | Guinea pig | Not classified |
| 2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with 2-methyl-1,3-benzenediamine and sodium methoxide | Mouse | Not classified |
| Ethylbenzene | Human | Not classified |
| Diethylaminoethanol | Guinea pig | Not classified |
| 2,3-Epoxypropyl neodecanoate | Guinea pig | Sensitizing |
| Cumene | Guinea pig | Not classified |
| Methyl alcohol | Guinea pig | Not classified |
| Formaldehyde | Guinea pig | Sensitizing |
| Naphthenic acid | Guinea pig | Sensitizing |
| Benzo(a)pyrene | Mouse | Sensitizing |

## Respiratory Sensitization

| Name | Species | Value |
|---|---|---|
| Formaldehyde | Human | Some positive data exist, but the data are not sufficient for classification |

## Germ Cell Mutagenicity

| Name | Route | Value |
|---|---|---|
| Heavy aromatic solvent naphtha (Petroleum) | In Vitro | Not mutagenic |
| Heavy aromatic solvent naphtha (Petroleum) | 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 |
| Organic pigment (NJ TSR # 04499600-5229P) | In Vitro | Not mutagenic |
| Light aromatic solvent naphtha (Petroleum) | In Vitro | Not mutagenic |
| Butyl alcohol | In vivo | Not mutagenic |
| Butyl alcohol | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Xylene | In Vitro | Not mutagenic |
| Xylene | In vivo | Not mutagenic |
| 1,2,4-Trimethylbenzene | In Vitro | Not mutagenic |
| 2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester, reaction products with 2-methyl-1,3-benzenediamine and sodium methoxide | In Vitro | Not mutagenic |

| | | |
|---|---|---|
| Ethylbenzene | In vivo | Not mutagenic |
| Ethylbenzene | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Diethylaminoethanol | In Vitro | Not mutagenic |
| Diethylaminoethanol | 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 |
| Cumene | In Vitro | Not mutagenic |
| Cumene | In vivo | Not mutagenic |
| Methyl alcohol | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Methyl alcohol | In vivo | Some positive data exist, but the data are not sufficient for classification |
| Formaldehyde | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Formaldehyde | In vivo | Mutagenic |
| Naphthenic acid | In vivo | Not mutagenic |
| Naphthenic acid | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Benzo(a)pyrene | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Benzo(a)pyrene | 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 |
| Xylene | Dermal | Rat | Not carcinogenic |
| Xylene | Ingestion | Multiple animal species | Not carcinogenic |
| Xylene | Inhalation | Human | Some positive data exist, but the data are not sufficient for classification |
| Ethylbenzene | Inhalation | Multiple animal species | Carcinogenic |
| Cumene | Inhalation | Multiple animal species | Carcinogenic |
| Napthalene | Inhalation | Multiple animal species | Carcinogenic |
| Methyl alcohol | Inhalation | Multiple animal species | Not carcinogenic |
| Formaldehyde | Not Specified | Human and animal | Carcinogenic |
| Benzo(a)pyrene | Dermal | Human and animal | Carcinogenic |
| Benzo(a)pyrene | Ingestion | Human and animal | Carcinogenic |
| Benzo(a)pyrene | Inhalation | Human and animal | Carcinogenic |

## Reproductive Toxicity

## Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Heavy aromatic solvent naphtha (Petroleum) | Not Specified | Not classified for female reproduction | Rat | NOAEL Not available | 2 generation |
| Heavy aromatic solvent naphtha (Petroleum) | Not Specified | Not classified for male reproduction | Rat | NOAEL Not available | 2 generation |
| Heavy aromatic solvent naphtha (Petroleum) | Not Specified | Not classified for development | Rat | NOAEL Not available | 2 generation |
| 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 | 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 |
| Organic pigment (NJ TSR # 04499600-5229P) | Ingestion | Not classified for female reproduction | Rat | NOAEL 1,000 mg/kg/day | premating into lactation |
| Organic pigment (NJ TSR # 04499600-5229P) | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,000 mg/kg/day | 31 days |
| Organic pigment (NJ TSR # 04499600-5229P) | Ingestion | Not classified for development | Rat | NOAEL 1,000 mg/kg/day | premating into lactation |
| Light aromatic solvent naphtha (Petroleum) | Not Specified | Not classified for female reproduction | Rat | NOAEL Not available | 2 generation |
| Light aromatic solvent naphtha (Petroleum) | Not Specified | Not classified for male reproduction | Rat | NOAEL Not available | 2 generation |
| Light aromatic solvent naphtha (Petroleum) | Not Specified | Not classified for development | Rat | NOAEL Not available | 2 generation |
| Butyl alcohol | Ingestion | Not classified for female reproduction | Rat | NOAEL 5,000 mg/kg/day | premating & during gestation |
| Butyl alcohol | Inhalation | Not classified for male reproduction | Rat | NOAEL 18 mg/l | 6 weeks |
| Butyl alcohol | Inhalation | Not classified for development | Rat | NOAEL 10.6 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 |
| 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 |
| Ethylbenzene | Inhalation | Not classified for development | Rat | NOAEL 4.3 mg/l | premating & during gestation |
| Diethylaminoethanol | Inhalation | Not classified for development | Rat | NOAEL 0.49 mg/l | during organogenesis |
| Diethylaminoethanol | Ingestion | Not classified for male reproduction | Rat | LOAEL 11 | 2 years |

| | | | | | |
|---|---|---|---|---|---|
| | | | | mg/kg/day | |
| Diethylaminoethanol | Ingestion | Not classified for development | Rat | NOAEL 100 mg/kg/day | during gestation |
| Cumene | Inhalation | Not classified for development | Rabbit | NOAEL 11.3 mg/l | during organogenesis |
| Methyl alcohol | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,600 mg/kg/day | 21 days |
| Methyl alcohol | Ingestion | Toxic to development | Mouse | LOAEL 4,000 mg/kg/day | during organogenesis |
| Methyl alcohol | Inhalation | Toxic to development | Mouse | NOAEL 1.3 mg/l | during organogenesis |
| Formaldehyde | Ingestion | Not classified for male reproduction | Rat | NOAEL 100 mg/kg | not applicable |
| Formaldehyde | Inhalation | Not classified for development | Rat | NOAEL 10 ppm | 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 |
| Benzo(a)pyrene | Ingestion | Toxic to female reproduction | Human and animal | NOAEL Not Available | |
| Benzo(a)pyrene | Inhalation | Toxic to female reproduction | Human and animal | NOAEL Not Available | |
| Benzo(a)pyrene | Ingestion | Toxic to male reproduction | Human and animal | NOAEL Not Available | |
| Benzo(a)pyrene | Inhalation | Toxic to male reproduction | Human and animal | NOAEL Not Available | |
| Benzo(a)pyrene | Ingestion | Toxic to development | Human and animal | NOAEL Not Available | |
| Benzo(a)pyrene | Inhalation | Toxic to development | Human and animal | NOAEL Not Available | |

## 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 |
|---|---|---|---|---|---|---|
| Heavy aromatic solvent naphtha (Petroleum) | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human and animal | 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 | Some positive data exist, but the | Human | NOAEL Not | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | data are not sufficient for classification | | available | |
| Cyclohexanone | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Professional judgement | NOAEL Not available | |
| Alkyl amine polymer (New Jersey Trade Secret Registry # 04499600-5252P) | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |
| Light aromatic solvent naphtha (Petroleum) | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human and animal | NOAEL Not available | |
| Light aromatic solvent naphtha (Petroleum) | Inhalation | respiratory irritation | May cause respiratory irritation | | NOAEL Not available | |
| Butyl alcohol | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| Butyl alcohol | Inhalation | respiratory irritation | May cause respiratory irritation | official classification | NOAEL Not available | |
| Butyl alcohol | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Human | 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 |
| 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 | |
| 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 | |
| Diethylaminoethanol | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| Diethylaminoethanol | Inhalation | respiratory irritation | May cause respiratory irritation | Rat | NOAEL 0.05 mg/l | 14 weeks |
| 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 |
| Napthalene | Ingestion | blood | Causes damage to organs | Human | NOAEL Not | poisoning |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | available | and/or abuse |
| Methyl alcohol | Inhalation | blindness | Causes damage to organs | Human | NOAEL Not available | occupational exposure |
| Methyl alcohol | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | not available |
| Methyl alcohol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL Not available | 6 hours |
| Methyl alcohol | Ingestion | blindness | Causes damage to organs | Human | NOAEL Not available | poisoning and/or abuse |
| Methyl alcohol | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | poisoning and/or abuse |
| Formaldehyde | Inhalation | respiratory system | Causes damage to organs | Rat | LOAEL 128 ppm | 6 hours |
| Formaldehyde | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| Naphthenic acid | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |

**Specific Target Organ Toxicity - repeated exposure**

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|---|---|---|---|---|---|---|
| 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 |
| Butyl alcohol | Inhalation | blood | Not classified | Rat | NOAEL 0.3 mg/l | 3 months |
| Butyl alcohol | Inhalation | auditory system | Not classified | Human | NOAEL Not available | occupational exposure |
| Butyl alcohol | Inhalation | liver \| kidney and/or bladder \| respiratory system | Not classified | Guinea pig | NOAEL Not available | 3 months |
| Butyl alcohol | Inhalation | nervous system | Not classified | Rat | NOAEL 9.09 mg/l | 13 weeks |
| Butyl alcohol | Ingestion | blood | Not classified | Rat | NOAEL 500 mg/kg/day | 13 weeks |
| Xylene | Inhalation | nervous system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.4 mg/l | 4 weeks |
| Xylene | Inhalation | auditory system | May cause damage to organs though prolonged or repeated exposure | Rat | LOAEL 7.8 mg/l | 5 days |
| Xylene | Inhalation | liver | Not classified | Multiple animal species | NOAEL Not available | |
| Xylene | Inhalation | heart \| endocrine system \| gastrointestinal tract \| hematopoietic system \| muscles \| kidney and/or bladder \| respiratory system | Not classified | Multiple animal species | NOAEL 3.5 mg/l | 13 weeks |
| Xylene | Ingestion | auditory system | Not classified | Rat | NOAEL 900 | 2 weeks |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | mg/kg/day | |
| 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 |
| 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 |
| 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 |
| Diethylaminoethanol | Inhalation | liver \| kidney and/or bladder \| heart \| endocrine system \| bone, teeth, nails, and/or hair \| hematopoietic system \| immune system \| nervous system \| respiratory system | Not classified | Rat | NOAEL 0.36 mg/l | 14 weeks |
| Diethylaminoethanol | Ingestion | nervous system | Some positive data exist, but the | Dog | NOAEL 20 | 1 years |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | data are not sufficient for classification | | mg/kg/day | |
| Diethylaminoethanol | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 400 mg/kg/day | 6 months |
| Diethylaminoethanol | Ingestion | heart \| endocrine system \| hematopoietic system \| liver \| respiratory system | Not classified | Rat | NOAEL 400 mg/kg/day | 2 years |
| Diethylaminoethanol | Ocular | eyes | Not classified | Rat | NOAEL 0.36 mg/l | 14 weeks |
| 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 |
| 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 |
| Napthalene | Dermal | blood | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Napthalene | Dermal | eyes | Not classified | Human | NOAEL Not available | occupational exposure |
| Napthalene | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.01 mg/l | 13 weeks |
| Napthalene | Inhalation | blood | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Napthalene | Inhalation | eyes | Not classified | Human | NOAEL Not available | occupational exposure |
| Napthalene | Ingestion | blood | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Napthalene | Ingestion | eyes | May cause damage to organs though prolonged or repeated exposure | Rabbit | LOAEL 500 mg/kg/day | 15 days |
| Methyl alcohol | Inhalation | liver | Not classified | Rat | NOAEL 6.55 mg/l | 4 weeks |
| Methyl alcohol | Inhalation | respiratory system | Not classified | Rat | NOAEL 13.1 mg/l | 6 weeks |
| Methyl alcohol | Ingestion | liver \| nervous system | Not classified | Rat | NOAEL 2,500 mg/kg/day | 90 days |
| Formaldehyde | Dermal | respiratory system | Not classified | Mouse | NOAEL 80 mg/kg/day | 60 weeks |
| Formaldehyde | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | NOAEL 0.3 ppm | 28 months |
| Formaldehyde | Inhalation | liver | Not classified | Rat | NOAEL 20 ppm | 13 weeks |
| Formaldehyde | Inhalation | hematopoietic system | Not classified | Mouse | NOAEL 15 ppm | 3 weeks |
| Formaldehyde | Inhalation | nervous system | Not classified | Mouse | NOAEL 10 ppm | 13 weeks |
| Formaldehyde | Inhalation | endocrine system \| immune system \| muscles \| kidney and/or bladder | Not classified | Rat | NOAEL 15 ppm | 28 months |

| | | | | | | |
|---|---|---|---|---|---|---|
| Formaldehyde | Inhalation | gastrointestinal tract | Not classified | Rat | NOAEL 15 ppm | 2 years |
| Formaldehyde | Inhalation | eyes \| vascular system | Not classified | Rat | NOAEL 14.3 ppm | 2 years |
| Formaldehyde | Inhalation | heart | Not classified | Mouse | NOAEL 14.3 ppm | 2 years |
| Formaldehyde | Ingestion | liver | Not classified | Rat | NOAEL 300 mg/kg/day | 2 years |
| Formaldehyde | Ingestion | immune system | Not classified | Rat | NOAEL 20 mg/kg/day | 4 weeks |
| Formaldehyde | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 15 mg/kg/day | 24 months |
| Formaldehyde | Ingestion | nervous system | Not classified | Rat | NOAEL 109 mg/kg/day | 2 years |
| Formaldehyde | Ingestion | heart \| endocrine system \| hematopoietic system \| respiratory system \| vascular system | Not classified | Rat | NOAEL 300 mg/kg/day | 2 years |
| Formaldehyde | Ingestion | skin \| muscles \| eyes | Not classified | Rat | NOAEL 109 mg/kg/day | 2 years |
| Naphthenic acid | Ingestion | endocrine system \| 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 | Not classified | Rat | NOAEL 881 mg/kg/day | 90 days |

**Aspiration Hazard**

| Name | Value |
|---|---|
| Heavy aromatic solvent naphtha (Petroleum) | Aspiration hazard |
| Light aromatic solvent naphtha (Petroleum) | Aspiration hazard |
| Butyl alcohol | Some positive data exist, but the data are not sufficient for classification |
| Xylene | Aspiration hazard |
| 1,2,4-Trimethylbenzene | Aspiration hazard |
| Ethylbenzene | 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

## Ecotoxicological information

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

## Chemical fate information

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

# SECTION 13: Disposal considerations

**13.1. Disposal 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.

**EPA Hazardous Waste Number (RCRA):** D001 (Ignitable)

# SECTION 14: Transport Information

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

# SECTION 15: Regulatory information

## 15.1. US Federal Regulations
Contact 3M for more information.

**EPCRA 311/312 Hazard Classifications:**

| **Physical Hazards** |
|---|
| Flammable (gases, aerosols, liquids, or solids) |

| **Health Hazards** |
|---|
| Carcinogenicity |
| Reproductive toxicity |
| Respiratory or Skin Sensitization |
| Serious eye damage or eye irritation |
| Skin Corrosion or Irritation |
| Specific target organ toxicity (single or repeated exposure) |

**Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):**

| Ingredient | C.A.S. No | % by Wt |
|---|---|---|
| Xylene | 1330-20-7 | Trade Secret 1 - 5 |
| Xylene (Benzene, dimethyl-) | 1330-20-7 | Trade Secret 1 - 5 |
| 1,2,4-Trimethylbenzene | 95-63-6 | Trade Secret 0.1 - 2 |
| Diethylene glycol butyl ether (CAS NO SEQ548L1) | 112-34-5 | Trade Secret 0.1 - 2 |
| Diethylene glycol butyl ether (GLYCOL ETHERS) | 112-34-5 | Trade Secret 0.1 - 2 |
| Butyl alcohol | 71-36-3 | Trade Secret 1 - 5 |
| Ethylbenzene | 100-41-4 | Trade Secret < 0.6 |
| Cumene | 98-82-8 | Trade Secret < 0.5 |
| Napthalene | 91-20-3 | Trade Secret < 0.4 |
| Formaldehyde | 50-00-0 | Trade Secret < 0.2 |

## 15.2. State Regulations
Contact 3M for more information.

## 15.3. Chemical Inventories

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.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

**NFPA Hazard Classification**
**Health:** 3 **Flammability:** 2 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

| | | | |
|---|---|---|---|
| **Document Group:** | 28-8866-7 | **Version Number:** | 9.00 |
| **Issue Date:** | 06/05/24 | **Supercedes Date:** | 12/15/23 |

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