

Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3MTM Neoprene Contact Adhesive 5, Green

Product Identification Numbers

62-4497-5530-5, 62-4497-7520-4, 62-4497-8520-3, 62-4497-9520-2, 62-4497-9522-8, 62-4497-9530-1, 62-4497-9520-2, 62-4497-9520-2, 62-4497-9520-2, 62-4497-9530-1, 62-4497-9500-1, 62-4497-950-1, 62-4497-950-1, 62-4497-950-1, 62-4497-950-1, 62-4497-950-1, 62-4497-950-1, 62-4497-950-1, 62-4497-950-1, 62-4497-950-1, 62-44

1.2. Recommended use and restrictions on use

Recommended use

Adhesive., Industrial use

1.3. Supplier's details

MANUFACTURER: 3M

DIVISION: Industrial Adhesives and Tapes 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 2.

Serious Eye Damage/Irritation: Category 2A. Skin Corrosion/Irritation: Category 2.

Reproductive Toxicity: Category 1B.

Carcinogenicity: Category 2.

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 | Exclamation mark | Health Hazard |

Pictograms







Hazard Statements

Highly flammable liquid and vapor.

Causes serious eye irritation.

Causes skin irritation.

May cause drowsiness or dizziness.

May damage fertility or the unborn child.

Suspected of causing cancer.

Causes damage to organs through prolonged or repeated exposure:

nervous system | 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.

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.

If eye irritation persists: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

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.

11% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Naphtha (petroleum), solvent-refined light	64741-84-0	20 - 45 Trade Secret *
Acetone	67-64-1	15 - 30 Trade Secret *
n-Hexane	110-54-3	10 - 30 Trade Secret *
Heptane	142-82-5	3 - 15 Trade Secret *
Toluene	108-88-3	5 - 15 Trade Secret *
Polychloroprene	9010-98-4	7 - 13 Trade Secret *
Magnesium Resinate	68037-42-3	5 - 10 Trade Secret *
2-Methylpentane	107-83-5	5 - 8 Trade Secret *
3-Methylpentane	96-14-0	5 - 8 Trade Secret *
Cyclohexane	110-82-7	< 5 Trade Secret *
Ethylbenzene	100-41-4	< 1 Trade Secret *
Rosin	8050-09-7	< 1 Trade Secret *
Zinc Oxide	1314-13-2	< 1 Trade Secret *
Methyl Alcohol	67-56-1	< 0.5 Trade Secret *
C.I. Solvent Yellow 3	97-56-3	< 0.02 Trade Secret *

^{*}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. 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

Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness). 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

<u>Substance</u>	<u>Condition</u>
Aldehydes	During Combustion
Hydrocarbons	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Chloride	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. Avoid release to the environment. 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 heat. 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
Ethylbenzene	100-41-4	ACGIH	TWA:20 ppm	A3: Confirmed animal
				carcin.
Ethylbenzene	100-41-4	OSHA	TWA:435 mg/m3(100 ppm)	
2-Methylpentane	107-83-5	ACGIH	TWA:500 ppm;STEL:1000	
			ppm	
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human
				carcin, Ototoxicant
Toluene	108-88-3	OSHA	TWA:200 ppm;CEIL:300 ppm	
n-Hexane	110-54-3	ACGIH	TWA:50 ppm	Danger of cutaneous
				absorption
n-Hexane	110-54-3	OSHA	TWA:1800 mg/m3(500 ppm)	
Cyclohexane	110-82-7	ACGIH	TWA:100 ppm	
Cyclohexane	110-82-7	OSHA	TWA:1050 mg/m3(300 ppm)	
Zinc Oxide	1314-13-2	ACGIH	TWA(respirable fraction):2	
			mg/m3;STEL(respirable	
			fraction):10 mg/m3	
Zinc Oxide	1314-13-2	OSHA	TWA(as total dust):15	
			mg/m3;TWA(respirable	
			fraction):5 mg/m3;TWA(as	
			fume):5 mg/m3	
Heptane	142-82-5	ACGIH	TWA:400 ppm;STEL:500 ppm	
Heptane	142-82-5	OSHA	TWA:2000 mg/m3(500 ppm)	
Naphtha	64741-84-0	OSHA	TWA:400 mg/m3(100 ppm)	
Methyl Alcohol	67-56-1	ACGIH	TWA:200 ppm;STEL:250 ppm Danger of cutar	
				absorption
Methyl Alcohol	67-56-1	OSHA	TWA:260 mg/m3(200 ppm)	
Acetone	67-64-1	ACGIH	TWA:250 ppm;STEL:500 ppm	A4: Not class. as human
				carcin
Acetone	67-64-1	OSHA	TWA:2400 mg/m3(1000 ppm)	
Rosin	8050-09-7	ACGIH	TWA(as Resin, inhalable Dermal/Respiratory	
			fraction):0.001 mg/m3	Sensitizer
3-Methylpentane	96-14-0	ACGIH	TWA:500 ppm;STEL:1000	
			ppm	

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:

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

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

Half facepiece or full facepiece supplied-air respirator

Organic vapor respirators 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 Green

Odor Sweet Petroleum Odor threshold No Data Available

nН Not Applicable **Melting point** Not Applicable

>=80 °C [Details: Acetone] **Boiling Point Flash Point** -14 °F [Test Method:Closed Cup] [Details:Acetone]

Evaporation rate \geq [Ref Std:ETHER=1]

Flammability (solid, gas) Not Applicable Flammable Limits(LEL) 1.0 % volume 12.8 % volume Flammable Limits(UEL)

Vapor Pressure <=185 mmHg [@ 68 °F] **Vapor Density** 3.0 [*Ref Std*:AIR=1]

Density 0.803 g/ml

Specific Gravity 0.803 [*Ref Std*:WATER=1] Solubility in Water Slight (less than 10%) **Solubility- non-water** No Data Available

Partition coefficient: n-octanol/ water No Data Available

Autoignition temperature 465 °C

Decomposition temperatureNo Data Available

Viscosity 200 - 350 centipoise [@ 73.4 °F]

Hazardous Air Pollutants <=35.0 % weight [*Test Method*:Calculated]

Molecular weight No Data Available

VOC Less H2O & Exempt Solvents <=636 g/l [*Test Method*:calculated SCAQMD rule 443.1]

12 - 25 %

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

Solids Content

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

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:

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. May cause additional health effects (see below).

Eve 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.

Prolonged or repeated exposure may cause target organ effects:

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Peripheral Neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy.

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

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.

<u>Ingredient</u>	CAS No.	Class Description	Regulation
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
o-Aminoazotoluene	97-56-3	Anticipated human carcinogen	National Toxicology Program Carcinogens
ortho-Aminoazotoluene	97-56-3	Grp. 2B: Possible human carc.	International Agency for Research on 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
Naphtha (petroleum), solvent-refined light	Dermal	Rat	LD50 > 2,800 mg/kg
Naphtha (petroleum), solvent-refined light	Inhalation- Vapor (4 hours)	Rat	LC50 > 25.2 mg/l
Naphtha (petroleum), solvent-refined light	Ingestion	Rat	LD50 > 5,840 mg/kg

Page 8 **of** 18

Acetone	Dermal	Rabbit	LD50 > 15,688 mg/kg
Acetone	Inhalation-	Rat	LC50 76 mg/l
	Vapor (4		
	hours)		
Acetone	Ingestion	Rat	LD50 5,800 mg/kg
n-Hexane	Dermal	Rabbit	LD50 > 2,000 mg/kg
n-Hexane	Inhalation-	Rat	LC50 170 mg/l
	Vapor (4 hours)		
n-Hexane	Ingestion	Rat	LD50 > 28,700 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-	Rat	LC50 30 mg/l
	Vapor (4		
	hours)		
Toluene	Ingestion	Rat	LD50 5,550 mg/kg
Heptane	Dermal	Rabbit	LD50 3,000 mg/kg
Heptane	Inhalation-	Rat	LC50 103 mg/l
	Vapor (4		
Heptane	hours) Ingestion	Rat	LD50 > 15,000 mg/kg
Polychloroprene	Dermal	Kat	LD50 = 15,000 mg/kg LD50 estimated to be > 5,000 mg/kg
Polychloroprene	Ingestion	Rat	LD50 > 20,000 mg/kg
2-Methylpentane	Dermal	Kat	LD50 = 20,000 mg/kg LD50 estimated to be > 5,000 mg/kg
			, , ,
2-Methylpentane	Inhalation- Vapor		LC50 estimated to be > 50 mg/l
2-Methylpentane	Ingestion		LD50 estimated to be > 5,000 mg/kg
3-Methylpentane	Dermal		LD50 estimated to be > 5,000 mg/kg
3-Methylpentane	Inhalation- Vapor		LC50 estimated to be > 50 mg/l
3-Methylpentane	Ingestion		LD50 estimated to be > 5,000 mg/kg
Magnesium Resinate	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Magnesium Resinate	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
Cyclohexane	Inhalation-	Rat	LC50 > 32.9 mg/l
-,	Vapor (4		
	hours)		
Cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg
Zinc Oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Zinc Oxide	Inhalation-	Rat	LC50 > 5.7 mg/l
	Dust/Mist		
7. 0.11	(4 hours)		VD505000 //
Zinc Oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Rosin	Dermal	Rabbit	LD50 > 2,500 mg/kg
Rosin Methyl Algebal	Ingestion Dermal	Rat	LD50 7,600 mg/kg LD50 estimated to be 1,000 - 2,000 mg/kg
Methyl Alcohol			
Methyl Alcohol	Inhalation- Vapor		LC50 estimated to be 10 - 20 mg/l
Methyl Alcohol	Ingestion		LD50 estimated to be 50 - 300 mg/kg
Ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
Ethylbenzene	Inhalation-	Rat	LC50 17.4 mg/l
	Vapor (4		
Ed. II	hours)	D (LD50 4760 //
Ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Naphtha (petroleum), solvent-refined light	Rabbit	Irritant
Acetone	Mouse	Minimal irritation
n-Hexane	Human	Mild irritant
	and	
	animal	

Toluene	Rabbit	Irritant
Heptane	Human	Mild irritant
Polychloroprene	Human	No significant irritation
2-Methylpentane	Professio	Mild irritant
	nal	
	judgeme	
	nt	
3-Methylpentane	Professio	Mild irritant
	nal	
	judgeme	
	nt	
Cyclohexane	Rabbit	Mild irritant
Zinc Oxide	Human	No significant irritation
	and	
	animal	
Rosin	Rabbit	No significant irritation
Methyl Alcohol	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
Naphtha (petroleum), solvent-refined light	Rabbit	Mild irritant
Acetone	Rabbit	Severe irritant
n-Hexane	Rabbit	Mild irritant
Toluene	Rabbit	Moderate irritant
Heptane	Professio	Moderate irritant
	nal	
	judgeme	
D 1 11	nt	N
Polychloroprene	Professio	No significant irritation
	nal	
	judgeme	
	nt	
2-Methylpentane	Professio	Moderate irritant
	nal	
	judgeme	
	nt	
3-Methylpentane	Professio	Moderate irritant
	nal	
	judgeme	
	nt	
Cyclohexane	Rabbit	Mild irritant
Zinc Oxide	Rabbit	Mild irritant
Rosin	Rabbit	Mild irritant
Methyl Alcohol	Rabbit	Moderate irritant
Ethylbenzene	Rabbit	Moderate irritant

Skin Sensitization

Name	Species	Value
Naphtha (petroleum), solvent-refined light	Guinea	Not classified
	pig	
n-Hexane	Human	Not classified
Toluene	Guinea	Not classified
	pig	
Zinc Oxide	Guinea	Not classified
	pig	
Rosin	Guinea	Sensitizing
	pig	
Methyl Alcohol	Guinea	Not classified
	pig	
Ethylbenzene	Human	Not classified

Respiratory Sensitization

Name	e	Species	Value

Rosin	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value		
Acetone	In vivo	Not mutagenic		
Acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification		
n-Hexane	In Vitro	Not mutagenic		
n-Hexane	In vivo	Not mutagenic		
Toluene	In Vitro	Not mutagenic		
Toluene	In vivo	Not mutagenic		
Heptane	In Vitro	Not mutagenic		
Cyclohexane	In Vitro	Not mutagenic		
Cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification		
Zinc Oxide	In Vitro	Some positive data exist, but the data are not sufficient for classification		
Zinc Oxide	In vivo	Some positive data exist, but the data are not sufficient for classification		
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		
Ethylbenzene	In vivo	Not mutagenic		
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification		

Carcinogenicity

Name	Route	Species	Value
Acetone	Not	Multiple	Not carcinogenic
	Specified	animal	
		species	
n-Hexane	Dermal	Mouse	Not carcinogenic
n-Hexane	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
Methyl Alcohol	Inhalation	Multiple	Not carcinogenic
		animal	
		species	
Ethylbenzene	Inhalation	Multiple	Carcinogenic
		animal	
		species	

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Naphtha (petroleum), solvent-refined light	Ingestion	Toxic to male reproduction	similar compoun ds	NOAEL not available	not available
Naphtha (petroleum), solvent-refined light	Inhalation	Toxic to male reproduction	similar compoun ds	NOAEL not available	not available
Acetone	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,700 mg/kg/day	13 weeks
Acetone	Inhalation	Not classified for development	Rat	NOAEL 5.2	during

Page 11 **of** 18

				mg/l	organogenesi s
n-Hexane	Ingestion	Not classified for development	Mouse	NOAEL 2,200 mg/kg/day	during organogenesi s
n-Hexane	Inhalation	Not classified for development	Rat	NOAEL 0.7 mg/l	during gestation
n-Hexane	Ingestion	Toxic to male reproduction	Rat	NOAEL 1,140 mg/kg/day	90 days
n-Hexane	Inhalation	Toxic to male reproduction	Rat	LOAEL 3.52 mg/l	28 days
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
Cyclohexane	Inhalation	Not classified for female reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Not classified for male reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Not classified for development	Rat	NOAEL 6.9 mg/l	2 generation
Zinc Oxide	Ingestion	Not classified for reproduction and/or development	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation
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 organogenesi s
Methyl Alcohol	Inhalation	Toxic to development	Mouse	NOAEL 1.3 mg/l	during organogenesi s
Ethylbenzene	Inhalation	Not classified for development	Rat	NOAEL 4.3 mg/l	premating & during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Naphtha (petroleum), solvent-refined light	Inhalation	central nervous system depression	May cause drowsiness or dizziness	similar compoun ds	NOAEL not available	not available
Naphtha (petroleum), solvent-refined light	Ingestion	central nervous system depression	May cause drowsiness or dizziness	similar compoun ds	NOAEL not availavle	not available
Acetone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 hours
Acetone	Inhalation	liver	Not classified	Guinea pig	NOAEL Not available	
Acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
n-Hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
n-Hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Rabbit	NOAEL Not available	8 hours

Page 12 **of** 18

			classification			
n-Hexane	Inhalation	respiratory system	Not classified	Rat	NOAEL 24.6 mg/l	8 hours
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
Heptane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Heptane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Heptane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
2-Methylpentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
2-Methylpentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
2-Methylpentane	Inhalation	cardiac sensitization	Not classified	Dog	NOAEL Not available	
2-Methylpentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
3-Methylpentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
3-Methylpentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
3-Methylpentane	Inhalation	cardiac sensitization	Not classified	Dog	NOAEL Not available	
3-Methylpentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
Cyclohexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Cyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
Cyclohexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
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
Ethylbenzene	Inhalation	central nervous	May cause drowsiness or	Human	NOAEL Not	

Page 13 **of** 18

		system depression	dizziness		available	
Ethylbenzene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Human and	NOAEL Not available	
			classification	animal	available	
Ethylbenzene	Ingestion	central nervous	May cause drowsiness or	Professio	NOAEL Not	
		system depression	dizziness	nal	available	
				judgeme		
				nt		

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Naphtha (petroleum), solvent-refined light	Inhalation	peripheral nervous system	May cause damage to organs though prolonged or repeated exposure	similar compoun ds	NOAEL not available	not available
Acetone	Dermal	eyes	Not classified	Guinea pig	NOAEL Not available	3 weeks
Acetone	Inhalation	hematopoietic system	Not classified	Human	NOAEL 3 mg/l	6 weeks
Acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 days
Acetone	Inhalation	kidney and/or bladder	Not classified	Guinea pig	NOAEL 119 mg/l	not available
Acetone	Inhalation	heart liver	Not classified	Rat	NOAEL 45 mg/l	8 weeks
Acetone	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 900 mg/kg/day	13 weeks
Acetone	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 200 mg/kg/day	13 weeks
Acetone	Ingestion	liver	Not classified	Mouse	NOAEL 3,896 mg/kg/day	14 days
Acetone	Ingestion	eyes	Not classified	Rat	NOAEL 3,400 mg/kg/day	13 weeks
Acetone	Ingestion	respiratory system	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	muscles	Not classified	Rat	NOAEL 2,500 mg/kg	13 weeks
Acetone	Ingestion	skin bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
n-Hexane	Inhalation	peripheral nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
n-Hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 1.76 mg/l	13 weeks
n-Hexane	Inhalation	liver	Not classified	Rat	NOAEL Not available	6 months
n-Hexane	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.76 mg/l	6 months
n-Hexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 35.2 mg/l	13 weeks
n-Hexane	Inhalation	auditory system immune system eyes	Not classified	Human	NOAEL Not available	occupational exposure
n-Hexane	Inhalation	heart skin endocrine system	Not classified	Rat	NOAEL 1.76 mg/l	6 months
n-Hexane	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,140 mg/kg/day	90 days
n-Hexane	Ingestion	endocrine system hematopoietic	Not classified	Rat	NOAEL Not available	13 weeks

Page 14 **of** 18

	1	1 4 11 1		T	T	T
		system liver				
		immune system kidney and/or				
		bladder				
Toluene	Inhalation	auditory system	Causes damage to organs through	Human	NOAEL Not	poisoning
Totache	imaaaion	eyes olfactory	prolonged or repeated exposure	Trumum	available	and/or abuse
		system	r · · · S · · · · · · · · · · · · · · ·			
Toluene	Inhalation	nervous system	May cause damage to organs	Human	NOAEL Not	poisoning
			though prolonged or repeated		available	and/or abuse
			exposure			
Toluene	Inhalation	respiratory system	Some positive data exist, but the	Rat	LOAEL 2.3	15 months
			data are not sufficient for		mg/l	
m 1	× 1 1 .:		classification		NO 1 EX 11 2	1.5
Toluene	Inhalation	heart liver kidney and/or bladder	Not classified	Rat	NOAEL 11.3	15 weeks
Toluene	Inhalation	endocrine system	Not classified	Rat	mg/l NOAEL 1.1	4 weeks
Toruene	Illiaiation	endocrine system	Not classified	Kat	mg/l	4 WCCKS
Toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not	20 days
Totache	imaaaion	minute system	1 tot classified	Mouse	available	20 days
Toluene	Inhalation	bone, teeth, nails,	Not classified	Mouse	NOAEL 1.1	8 weeks
		and/or hair			mg/l	
Toluene	Inhalation	hematopoietic	Not classified	Human	NOAEL Not	occupational
		system vascular			available	exposure
		system				
Toluene	Inhalation	gastrointestinal tract	Not classified	Multiple	NOAEL 11.3	15 weeks
				animal	mg/l	
T. 1	Y .:			species	NOAEL 625	12 1
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for	Rat	NOAEL 625	13 weeks
			classification		mg/kg/day	
Toluene	Ingestion	heart	Not classified	Rat	NOAEL	13 weeks
Totache	Ingestion	neart	Not classified	Rat	2,500	15 WCCKS
					mg/kg/day	
Toluene	Ingestion	liver kidney and/or	Not classified	Multiple	NOAEL	13 weeks
		bladder		animal	2,500	
				species	mg/kg/day	
Toluene	Ingestion	hematopoietic	Not classified	Mouse	NOAEL 600	14 days
		system			mg/kg/day	
Toluene	Ingestion	endocrine system	Not classified	Mouse	NOAEL 105	28 days
					mg/kg/day	
Toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105	4 weeks
II	Indepted	Linear Language	Not classified	D-4	mg/kg/day NOAEL 12	26 weeks
Heptane	Inhalation	liver nervous system kidney	Not classified	Rat	mg/l	26 weeks
		and/or bladder			IIIg/I	
2-Methylpentane	Inhalation	peripheral nervous	Not classified	Rat	NOAEL 5.3	14 weeks
2 Methy pentane	imaaaion	system	1 tot classified	Tut	mg/l	11 Weeks
2-Methylpentane	Ingestion	peripheral nervous	Not classified	Rat	NOAEL Not	8 weeks
		system			available	
2-Methylpentane	Ingestion	kidney and/or	Not classified	Rat	LOAEL	28 days
		bladder			2,000 mg/kg	
3-Methylpentane	Inhalation	peripheral nervous	Not classified	Rat	NOAEL 5.3	14 weeks
22644	*	system	27 1 10 10		mg/l	0 1
3-Methylpentane	Ingestion	peripheral nervous	Not classified	Rat	NOAEL Not available	8 weeks
3-Methylpentane	Ingestion	system kidney and/or	Not classified	Dot	LOAEL	28 days
3-ivienty (pentane	ingestion	bladder	INOL CIASSIFICU	Rat	2,000 mg/kg	20 uays
Cyclohexane	Inhalation	liver	Not classified	Rat	NOAEL 24	90 days
= , = 10114111111					mg/l	20 44130
Cyclohexane	Inhalation	auditory system	Not classified	Rat	NOAEL 1.7	90 days
Ž		5 5			mg/l	3-
Cyclohexane	Inhalation	kidney and/or	Not classified	Rabbit	NOAEL 2.7	10 weeks
		bladder			mg/l	
Cyclohexane	Inhalation	hematopoietic	Not classified	Mouse	NOAEL 24	14 weeks
		system			mg/l	
Cyclohexane	Inhalation	peripheral nervous	Not classified	Rat	NOAEL 8.6	30 weeks
		system			mg/l	j

Page 15 **of** 18

Zinc Oxide	Ingestion	nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	10 days
Zinc Oxide	Ingestion	endocrine system hematopoietic system kidney and/or bladder	Not classified	Other	NOAEL 500 mg/kg/day	6 months
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
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

Aspiration Hazard

Name	Value
Naphtha (petroleum), solvent-refined light	Aspiration hazard
n-Hexane	Aspiration hazard
Toluene	Aspiration hazard
Heptane	Aspiration hazard
2-Methylpentane	Aspiration hazard
3-Methylpentane	Aspiration hazard
Cyclohexane	Aspiration hazard
Ethylbenzene	Aspiration hazard

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

SECTION 12: Ecological information

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

Page 16 of 18

13.1. Disposal methods

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

Incinerate uncured product in a permitted waste incineration facility. As a disposal alternative, Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. 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), D018 (Benzene), D035 (Methyl ethyl ketone)

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	
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):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Cyclohexane	110-82-7	Trade Secret < 5
n-Hexane	110-54-3	Trade Secret 10 - 30
n-Hexane (Hexane)	110-54-3	Trade Secret 10 - 30
Toluene	108-88-3	Trade Secret 5 - 15
Ethylbenzene	100-41-4	Trade Secret < 1

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.

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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: 2 Flammability: 3 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:
 10-2793-7
 Version Number:
 36.01

 Issue Date:
 05/16/22
 Supercedes Date:
 09/26/21

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