

Safety Data Sheet

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Document Group:	20-7855-8	Version Number:	5.00
Issue Date:	05/08/15	Supercedes Date:	02/04/13

Product identifier

3M[™] Flexible Bumper Patch Kit, 05888

ID Number(s):

60-4550-2936-7, 60-5100-2944-4

Recommended use

Automotive, The product packaging contains six 4" x 8" patches and six Adhesion Promoter 06396 packets.

Supplier's details

MANUFACTURER:	3M
DIVISION:	Automotive Aftermarket
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

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

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

34-4427-0

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3MTM Flexible Bumper Patch Kit, 05888 05/08/15

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Document Group:	34-4427-0	Version Number:	2.06
Issue Date:	01/13/20	Supercedes Date:	06/19/18

SECTION 1: Identification

1.1. Product identifier

ЗМтм	Adhesion	Promoter.	ΡN	06396
2111	runcoron	riomoter,	T T 1	00570

Product Identification Numbers			
ID Number	UPC	ID Number	UPC
70-0706-9843-9	00-51131-06396-9		

7100009578

1 2 0

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Adhesion promoter absorbed on a sponge for use with attachment tapes

1.5. Supplier's details	
MANUFACTURER:	3M
DIVISION:	Automotive and Aerospace Solutions 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

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

2.1. Hazard classification

Flammable Liquid: Category 2. Serious Eye Damage/Irritation: Category 2A. Skin Sensitizer: Category 1. Reproductive Toxicity: Category 1B. Carcinogenicity: Category 2. 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 | Exclamation mark | Health Hazard |

Pictograms



Hazard Statements Highly flammable liquid and vapor.

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

General:

Keep out of reach of children.

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:

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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 or rash 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 cool. Keep container tightly closed. Store locked up.

Disposal:

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

2% of the mixture consists of ingredients of unknown acute oral toxicity.2% of the mixture consists of ingredients of unknown acute dermal toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Cyclohexane	110-82-7	30 - 60 Trade Secret *
Xylene	1330-20-7	30 - 60 Trade Secret *
Ethylbenzene	100-41-4	< 11 Trade Secret *
Ethyl Alcohol	64-17-5	5 - 10 Trade Secret *
Chlorinated Rubber	68609-36-9	1 - 5 Trade Secret *
Ethyl Acetate	141-78-6	1 - 5 Trade Secret *
Acrylate polymer (NJTSRN 04499600-5984P)	Trade Secret*	1 - 5 Trade Secret *
4,4'-isopropylidenediphenol-epichlorohydrin Polymer	25068-38-6	0.1 - 1 Trade Secret *
Methyl Alcohol	67-56-1	< 0.5 Trade Secret *
Toluene	108-88-3	< 0.3 Trade Secret *
Benzene	71-43-2	< 0.02 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

See Section 11.1. Information on toxicological effects.

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

SECTION 5: Fire-fighting measures

5.1. 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	<u>Condition</u>
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.

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. 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. 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

Keep out of reach of children. 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 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	OSHA	TWA:435 mg/m3(100 ppm)	
Ethylbenzene	100-41-4	ACGIH	TWA:20 ppm	A3: Confirmed animal
				carcin.
Toluene	108-88-3	OSHA	TWA:200 ppm;CEIL:300 ppm	
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human
				carcin
Cyclohexane	110-82-7	ACGIH	TWA:100 ppm	
Cyclohexane	110-82-7	OSHA	TWA:1050 mg/m3(300 ppm)	
Xylene	1330-20-7	ACGIH	TWA:100 ppm;STEL:150 ppm	A4: Not class. as human
				carcin
Xylene	1330-20-7	OSHA	TWA:435 mg/m3(100 ppm)	
Ethyl Acetate	141-78-6	OSHA	TWA:1400 mg/m3(400 ppm)	
Ethyl Acetate	141-78-6	ACGIH	TWA:400 ppm	
Ethyl Alcohol	64-17-5	ACGIH	STEL:1000 ppm	A3: Confirmed animal
				carcin.
Ethyl Alcohol	64-17-5	OSHA	TWA:1900 mg/m3(1000 ppm)	
Methyl Alcohol	67-56-1	ACGIH	TWA:200 ppm;STEL:250 ppm	SKIN
Methyl Alcohol	67-56-1	OSHA	TWA:260 mg/m3(200 ppm)	
Benzene	71-43-2	ACGIH	TWA:0.5 ppm;STEL:2.5 ppm	SKIN, A1: Confirmed
				human carcin.
Benzene	71-43-2	OSHA	TWA:1 ppm;TWA:10	29 CFR 1910.1028
			ppm;STEL:5 ppm;CEIL:25	
			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

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates 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	Yellow
Specific Physical Form:	Sponge holding approximately 2 milliliters of liquid.
Odor	Solvent
Odor threshold	No Data Available
рН	4.4 - 5 [<i>Test Method</i> :Tested per ASTM protocol]
-	[Details:@23°C]
Melting point	Not Applicable
Boiling Point	73.1 °C [<i>Test Method</i> :Tested per ASTM protocol]
-	[Details:@760mmHg]
Flash Point	34 °F [Test Method:SETAFLASH]

Evaporation rate	6.4 [<i>Test Method</i> :Estimated] [<i>Ref Std</i> :XYLENE=1]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	1 % [<i>Test Method</i> :Estimated]
Flammable Limits(UEL)	6 % [<i>Test Method</i> :Estimated]
Vapor Pressure	83.2 mmHg [@ 20 °C] [Test Method: Tested per ASTM protocol]
Vapor Density	1.7 [<i>Test Method</i> :Estimated] [<i>Ref Std</i> :AIR=1]
Density	0.82 g/ml
Specific Gravity	0.82 [<i>Ref Std</i> :WATER=1]
Solubility In Water	10 %
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	430 °C
Decomposition temperature	No Data Available
Viscosity	<= 25 centipoise
Hazardous Air Pollutants	< 35 % weight [Test Method:Calculated]
Molecular weight	Not Applicable
Volatile Organic Compounds	<=781 g/l [<i>Test Method</i> :calculated SCAQMD rule 443.1]
	[Details:Calculated]
Percent volatile	Approximately 95 %
VOC Less H2O & Exempt Solvents	<=781 g/l [<i>Test Method</i> :calculated SCAQMD rule 443.1]
	[Details:Calculated]

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 Heat Sparks and/or flames

10.5. Incompatible materials Strong acids Strong oxidizing agents

10.6. Hazardous decomposition products

Substance None known. **Condition**

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.

May cause additional health effects (see below).

Skin Contact:

May be harmful in contact with skin.

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

May cause additional health effects (see below).

Eye Contact:

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

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

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
Benzene	71-43-2	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Benzene	71-43-2	Known human carcinogen	National Toxicology Program Carcinogens
Benzene	71-43-2	Cancer hazard	OSHA Carcinogens

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Grp. 2B: Possible human carc.

International Agency for Research on Cancer

Additional Information:

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

100-41-4

Toxicological Data

Ethylbenzene

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 ATE2,000 - 5,000 mg/kg
Overall product	Inhalation- Vapor(4 hr)		No data available; calculated ATE20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE >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
Xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
Xylene	Inhalation-	Rat	LC50 29 mg/l
	Vapor (4		
Vidama	Incurs)	Det	LD50 2.522 mg/lrg
Aylene Ethylhengene	Dormal	Ral	LD50 5,525 mg/kg
Ethylbenzene	Inhalation	Rabbit	LD50 13,453 llig/kg
Euryibenzene	Vapor (4	Kai	LC50 17.4 llig/1
	hours)		
Ethylbenzene	Ingestion	Rat	LD50 4.769 mg/kg
Ethyl Alcohol	Dermal	Rabbit	LD50 > 15.800 mg/kg
Ethyl Alcohol	Inhalation-	Rat	LC50 124.7 mg/l
	Vapor (4		
	hours)		
Ethyl Alcohol	Ingestion	Rat	LD50 17,800 mg/kg
Ethyl Acetate	Dermal	Rabbit	LD50 > 18,000 mg/kg
Ethyl Acetate	Inhalation-	Rat	LC50 70.5 mg/l
	Vapor (4		
	hours)	D (
Ethyl Acetate	Ingestion	Rat	LD50 5,620 mg/kg
Chlorinated Rubber	Dermal	Guinea	LD50 > 1,000 mg/kg
Chlorinated Rubber	Ingestion	Rat	LD50 > 3.200 mg/kg
Methyl Alcohol	Dermal		LD50 estimated to be 1,000 - 2,000 mg/kg
Methyl Alcohol	Inhalation-		LC50 estimated to be 10 - 20 mg/l
	Vapor		
Methyl Alcohol	Ingestion		LD50 estimated to be 50 - 300 mg/kg
4,4'-isopropylidenediphenol-epichlorohydrin Polymer	Dermal	Rat	LD50 > 1,600 mg/kg
4,4'-isopropylidenediphenol-epichlorohydrin Polymer	Ingestion	Rat	LD50 > 1,000 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

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value

Cyclohexane	Rabbit	Mild irritant
Xylene	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Mild irritant
Ethyl Alcohol	Rabbit	No significant irritation
Ethyl Acetate	Rabbit	Minimal irritation
Chlorinated Rubber	Guinea	No significant irritation
	pig	
Methyl Alcohol	Rabbit	Mild irritant
4,4'-isopropylidenediphenol-epichlorohydrin Polymer	Rabbit	Mild irritant
Toluene	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Cyclohexane	Rabbit	Mild irritant
Xylene	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Moderate irritant
Ethyl Alcohol	Rabbit	Severe irritant
Ethyl Acetate	Rabbit	Mild irritant
Chlorinated Rubber	Professio	Mild irritant
	nal	
	judgeme	
	nt	
Methyl Alcohol	Rabbit	Moderate irritant
4,4'-isopropylidenediphenol-epichlorohydrin Polymer	Rabbit	Moderate irritant
Toluene	Rabbit	Moderate irritant

Skin Sensitization

Name	Species	Value
Ethylbenzene	Human	Not classified
Ethyl Alcohol	Human	Not classified
Ethyl Acetate	Guinea	Not classified
	pig	
Methyl Alcohol	Guinea	Not classified
	pig	
4,4'-isopropylidenediphenol-epichlorohydrin Polymer	Human	Sensitizing
	and	
	animal	
Toluene	Guinea	Not classified
	pig	

Respiratory Sensitization

Name	Species	Value
4,4'-isopropylidenediphenol-epichlorohydrin Polymer	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Cyclohexane	In Vitro	Not mutagenic
Cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
Ethyl Alcohol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Ethyl Alcohol	In vivo	Some positive data exist, but the data are not sufficient for classification
Ethyl Acetate	In Vitro	Not mutagenic
Ethyl Acetate	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
4,4'-isopropylidenediphenol-epichlorohydrin Polymer	In vivo	Not mutagenic
4,4'-isopropylidenediphenol-epichlorohydrin Polymer	In Vitro	Some positive data exist, but the data are not sufficient for classification
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
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
Ethyl Alcohol	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Methyl Alcohol	Inhalation	Multiple animal species	Not carcinogenic
4,4'-isopropylidenediphenol-epichlorohydrin Polymer	Dermal	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

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
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
Xylene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
Xylene	Ingestion	Not classified for development	Mouse	NOAEL Not available	during organogenesi s
Xylene	Inhalation	Not classified for development	Multiple animal species	NOAEL Not available	during gestation
Ethylbenzene	Inhalation	Not classified for development	Rat	NOAEL 4.3 mg/l	premating & during gestation
Ethyl Alcohol	Inhalation	Not classified for development	Rat	NOAEL 38 mg/l	during gestation
Ethyl Alcohol	Ingestion	Not classified for development	Rat	NOAEL 5,200 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
4,4'-isopropylidenediphenol- epichlorohydrin Polymer	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-isopropylidenediphenol- epichlorohydrin Polymer	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-isopropylidenediphenol- epichlorohydrin Polymer	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesi s
4,4'-isopropylidenediphenol- epichlorohydrin Polymer	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
Toluene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.3 mg/l	1 generation
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
Toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse

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
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	
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
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	Human and	NOAEL Not available	

			classification	animal		
Ethylbenzene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
Ethyl Alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 2.6 mg/l	30 minutes
Ethyl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available
Ethyl Alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL not available	
Ethyl Alcohol	Ingestion	kidney and/or bladder	Not classified	Dog	NOAEL 3,000 mg/kg	
Ethyl Acetate	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Ethyl Acetate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Ethyl Acetate	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	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
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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Cyclohexane	Inhalation	liver	Not classified	Rat	NOAEL 24 mg/l	90 days
Cyclohexane	Inhalation	auditory system	Not classified	Rat	NOAEL 1.7 mg/l	90 days
Cyclohexane	Inhalation	kidney and/or bladder	Not classified	Rabbit	NOAEL 2.7 mg/l	10 weeks
Cyclohexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 24 mg/l	14 weeks
Cyclohexane	Inhalation	peripheral nervous system	Not classified	Rat	NOAEL 8.6 mg/l	30 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	Not classified	Multiple animal species	NOAEL 3.5 mg/l	13 weeks

		hematopoietic				
		system muscles				
		kidney and/or				
		bladder respiratory				
		system				
Xylene	Ingestion	auditory system	Not classified	Rat	NOAEL 900 mg/kg/day	2 weeks
Xylene	Ingestion	kidney and/or	Not classified	Rat	NOAEL	90 days
		bladder			1,500	
					mg/kg/day	
Xylene	Ingestion	liver	Not classified	Multiple	NOAEL Not	
				anımal	available	
- X7_1	× ··	1 (11)		species	NOAF	102 1
Xylene	Ingestion	neart skin	Not classified	Mouse	NOAEL	103 weeks
		bone teeth nails			ng/kg/day	
		and/or hair			ing/kg/uay	
		hematopoietic				
		system immune				
		system nervous				
		system respiratory				
		system				
Ethylbenzene	Inhalation	kidney and/or	Some positive data exist, but the	Rat	NOAEL 1.1	2 years
		bladder	data are not sufficient for		mg/l	
Edually an end	Turk alla ti a u	Linna	Classification	Manag	NOAEL 11	102
Euryibenzene	minalation	liver	data are not sufficient for	Mouse	mg/l	105 weeks
			classification		iiig/1	
Ethylbenzene	Inhalation	hematonoietic	Not classified	Rat	NOAFL 3.4	28 days
Euryroenzene	mulution	system		itut	mg/l	20 au 35
Ethylbenzene	Inhalation	auditory system	Not classified	Rat	NOAEL 2.4	5 days
5					mg/l	
Ethylbenzene	Inhalation	endocrine system	Not classified	Mouse	NOAEL 3.3	103 weeks
					mg/l	
Ethylbenzene	Inhalation	gastrointestinal tract	Not classified	Rat	NOAEL 3.3	2 years
					mg/l	0.0.1
Ethylbenzene	Inhalation	bone, teeth, nails,	Not classified	Multiple	NOAEL 4.2	90 days
		and/or hair		animal	mg/1	
Ethylbanzana	Inhalation	heart	Not classified	Multiple	NOAEL 3.3	2 years
Eurytoenzene	milatation	system respiratory	Not classified	animal	mg/l	2 years
		system		species		
Ethylbenzene	Ingestion	liver kidney and/or	Not classified	Rat	NOAEL 680	6 months
5	Ũ	bladder			mg/kg/day	
Ethyl Alcohol	Inhalation	liver	Some positive data exist, but the	Rabbit	LOAEL 124	365 days
			data are not sufficient for		mg/l	
			classification			
Ethyl Alcohol	Inhalation	hematopoietic	Not classified	Rat	NOAEL 25	14 days
		system immune			mg/1	
Ethyl Alcohol	Ingestion	liver	Some positive data exist but the	Rat	LOAFI	4 months
Luiyi Alconol	ingestion	11701	data are not sufficient for	Kai	8 000	
			classification		mg/kg/dav	
Ethyl Alcohol	Ingestion	kidney and/or	Not classified	Dog	NOAEL	7 days
	Ĩ	bladder			3,000	
					mg/kg/day	
Ethyl Acetate	Inhalation	endocrine system	Not classified	Rat	NOAEL	90 days
	1	liver nervous			0.043 mg/l	
Televil A a state	Tabal C	system	Ni-t alara ifiad	D-L1.1	LOAFT 16	40 -1
Euryi Acetate	innaiation	system	not classified	Kadolt	mg/l	40 days
Ethyl Acetate	Ingestion	hematopoietic	Not classified	Rat	NOAFI	90 days
Early Accuaic	ingestion	system liver		ivat	3 600	Jouays
	1	kidney and/or			mg/kg/dav	
		bladder				
Methyl Alcohol	Inhalation	liver	Not classified	Rat	NOAEL 6.55	4 weeks
					mg/l	
Methyl Alcohol	Inhalation	respiratory system	Not classified	Rat	NOAEL 13.1	6 weeks

					mg/l	
Methyl Alcohol	Ingestion	liver nervous	Not classified	Rat	NOAEL	90 days
		system			2,500	
<u> </u>	Dermal	liver	Not classified	Rat	NOAFI	2 years
isopropylidenediphenol-	Dermai	nvei	Not classified	Rat	1.000	2 years
epichlorohydrin Polymer					mg/kg/day	
4,4'-	Dermal	nervous system	Not classified	Rat	NOAEL	13 weeks
isopropylidenediphenol-					1,000	
epichlorohydrin Polymer	x .:	1.		D.	mg/kg/day	20.1
4,4'-	Ingestion	auditory system	Not classified	Rat	NOAEL	28 days
epichlorohvdrin Polvmer		system			mg/kg/dav	
·1····		hematopoietic			8 8	
		system liver eyes				
		kidney and/or				
Toluene	Inhalation	auditory system	Causes damage to organs through	Human	NOAFL Not	poisoning
Tonuche	initiation	eyes olfactory	prolonged or repeated exposure	Trainan	available	and/or abuse
		system				
Toluene	Inhalation	nervous system	May cause damage to organs	Human	NOAEL Not	poisoning
			though prolonged or repeated		available	and/or abuse
Toluene	Inhalation	respiratory system	Some positive data exist but the	Rat	LOAFL 23	15 months
Toruche	initiation	respiratory system	data are not sufficient for	Rut	mg/l	15 months
			classification		ē	
Toluene	Inhalation	heart liver kidney	Not classified	Rat	NOAEL 11.3	15 weeks
T 1	X 1 1 C	and/or bladder			mg/l	
loluene	Inhalation	endocrine system	Not classified	Rat	mg/l	4 weeks
Toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic	Not classified	Human	NOAEL Not	occupational
		system vascular			available	exposure
Toluene	Inhalation	system	Not classified	Multiple	NOAEL 11.3	15 weeks
Tolucile	matation	gastronnestinar tract	Not classified	animal	mg/l	15 WEEKS
				species	8	
Toluene	Ingestion	nervous system	Some positive data exist, but the	Rat	NOAEL 625	13 weeks
			data are not sufficient for		mg/kg/day	
Toluene	Ingestion	heart	Classification	Pat	NOAEI	13 weeks
Tolucite	ingestion	licalt	Not classified	Kai	2.500	15 WEEKS
					mg/kg/day	
Toluene	Ingestion	liver kidney and/or	Not classified	Multiple	NOAEL	13 weeks
		bladder		animal	2,500	
Toluene	Ingestion	hematonoietic	Not classified	Mouse	NOAFI 600	14 days
1 Gluene	ingestion	system		mouse	mg/kg/day	17 uuy5
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
	1			1	ing/kg/day	1

Aspiration Hazard

Name	Value
Cyclohexane	Aspiration hazard
Xylene	Aspiration hazard
Ethylbenzene	Aspiration hazard
Toluene	Aspiration hazard

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

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.

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

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	
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	<u>C.A.S. No</u>	<u>% by Wt</u>
Cyclohexane	110-82-7	Trade Secret 30 - 60
Xylene	1330-20-7	Trade Secret 30 - 60
Xylene (Benzene, dimethyl-)	1330-20-7	30 - 60
Ethylbenzene	100-41-4	Trade Secret < 11
Benzene	71-43-2	Trade Secret < 0.02

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: 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.

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