

# **Safety Data Sheet**

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

# 1.1. Product identifier

3M(TM) Rubber & Vinyl 80 Spray Adhesive

# **Product Identification Numbers**

62-4996-4955-6

# 1.2. Relevant identified uses of the substance or mixture and uses advised against

### **Identified uses**

Adhesive aerosol

# 1.3. Details of the supplier of the safety data sheet

**ADDRESS:** 3M Israel, 91 Medinat Ha'Yehudim Street, Herzeliya 46120

**Telephone:** 09-961 5000

E Mail: innovation.il@mmm.com

Website: www.3M.com/il

# 1.4. Emergency telephone number

09-961 5000

# **SECTION 2: Hazard identification**

# 2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

# **CLASSIFICATION:**

Aerosol, Category 1 - Aerosol 1; H222, H229

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

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

Reproductive Toxicity, Category 2 - Repr. 2; H361

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

Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

# SIGNAL WORD

Danger

### **Symbols:**

GHS02 (Flame) |GHS07 (Exclamation mark) | GHS08 (Health Hazard) |GHS09 (Environment) |

# **Pictograms**



# **Ingredients:**

Ingredient	C.A.S. No.	EC No.	% by Wt
Methyl Acetate	79-20-9	201-185-2	30 - 40
Toluene	108-88-3	203-625-9	1 - 6

# **HAZARD STATEMENTS:**

H222 Extremely flammable aerosol.

H229 Pressurized container: may burst if heated.

H319 Causes serious eye irritation. H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.

H411 Toxic to aquatic life with long lasting effects.

# PRECAUTIONARY STATEMENTS

**Prevention:** 

P210A Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

**Response:** 

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

**Storage:** 

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.

Disposal:

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

regulations.

# SUPPLEMENTAL INFORMATION

**Supplemental Hazard Statements:** 

EUH208 Contains Rosin. May produce an allergic reaction.

Contains 2% of components with unknown hazards to the aquatic environment.

# **Notes on labelling:**

H304 is not required on the label because the product is an aerosol. Nota P applied to CAS 64742-48-9.

# 2.3. Other hazards

None known

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

Ingredient	C.A.S. No.	EC No.	% by Wt	Classification
Methyl Acetate	79-20-9	201-185-2	30 - 40	**Flam. Liq. 2**, H225; **Eye Irrit. 2**, H319; **STOT SE 3**, H336; **EUH066**, EUH066
Dimethyl Ether	115-10-6	204-065-8	25 - 35	**Flam. Gas 1**, H220; **Liquefied gas**, H280 - Nota U
Non-hazardous components (NJTS Reg. No. 04499600-6698)	Trade Secret		10 - 30	Substance not classified as hazardous
Cyclohexane	110-82-7	203-806-2	10 - 20	**Flam. Liq. 2**, H225; **Asp. Tox. 1**, H304; **Skin Irrit. 2**, H315; **STOT SE 3**, H336; **Aquatic Acute 1**, H400,M=1; **Aquatic Chronic 1**, H410,M=1
Toluene	108-88-3	203-625-9	1 - 6	**Flam. Liq. 2**, H225; **Asp. Tox. 1**, H304; **Skin Irrit. 2**, H315; **Repr. 2**, H361d; **STOT SE 3**, H336; **STOT RE 2**, H373 **Aquatic Chronic 3**, H412 **Eye Irrit. 2**, H319
Naphthol Spirits	64742-48-9	265-150-3	1 - 5	**Asp. Tox. 1**, H304 - Nota P **Aquatic Chronic 2**, H411 **Skin Irrit. 2**, H315; **STOT SE 3**, H336
Zinc Oxide	1314-13-2	215-222-5	0.1 1	**Aquatic Acute 1**, H400,M=1; **Aquatic Chronic 1**, H410,M=1
Rosin	8050-09-7	232-475-7	0 0.5	**Skin Sens. 1B**, H317

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

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

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

# Inhalation:

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

### **Skin Contact:**

Wash with soap and water. If signs/symptoms develop, get medical attention.

### **Eye Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

### If Swallowed:

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable.

# **SECTION 5: Fire-fighting measures**

# 5.1. Extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

# 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**

<b>Substance</b>	<u>Condition</u>
Aldehydes	During Combustion
Formaldehyde	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

# 5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

# **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. 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

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

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# **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. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. 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 contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

# 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store away from heat. Store away from acids. Store away from oxidizing agents.

### 7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# Occupational exposure limits

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

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human
				carcin
Cyclohexane	110-82-7	ACGIH	TWA:100 ppm	
Zinc Oxide	1314-13-2	ACGIH	TWA(respirable fraction):2	
			mg/m3;STEL(respirable	
			fraction):10 mg/m3	
Methyl Acetate	79-20-9	ACGIH	TWA:200 ppm;STEL:250 ppm	
Rosin	8050-09-7	ACGIH	Limit value not established:	Dermal/Respiratory
				Sensitizer, Cntrl all
				exposr-low as possib

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

# 8.2. Exposure controls

# 8.2.1. Engineering controls

Do not remain in area where available oxygen may be reduced. 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.

# 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.

Gloves made from the following material(s) are recommended: Nitrile Rubber

# 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:

Full facepiece air-purifying respirator suitable for organic vapors

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

Physical state Liquid

Appearance/Odor Clear to Yellow sweet fruity

Odor thresholdNo Data AvailablepHNot ApplicableBoiling point/boiling rangeNot ApplicableMelting pointNot Applicable

Melting pointNot ApplicableFlammability (solid, gas)Not ApplicableExplosive properties:Not ClassifiedOxidising properties:Not Classified

Flash Point -41.1 °C [Test Method: Tagliabue Open Cup]

Autoignition temperatureNo Data AvailableFlammable Limits(LEL)No Data AvailableFlammable Limits(UEL)No Data AvailableVapor PressureNot Applicable

**Relative Density** 0.835 [*Ref Std*:WATER=1]

Water solubility
Solubility- non-water
Partition coefficient: n-octanol/ water
Evaporation rate
Vapor Density
Negligible
No Data Available
1.9 [Ref Std: ETHER=1]
No Data Probability

Decomposition temperatureNot ApplicableViscosityNot ApplicableDensity0.835 g/ml

9.2. Other information

EU Volatile Organic CompoundsNo Data AvailableMolecular weightNo Data AvailablePercent volatile85.5 % weightSolids Content10 - 20 %

# **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

Hear

Sparks and/or flames

### 10.5. Incompatible materials

Strong oxidizing agents

# 10.6. Hazardous decomposition products

**Substance** 

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

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

# 11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

# Inhalation:

May be harmful if inhaled.

Intentional concentration and inhalation may be harmful or fatal.

Simple Asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal.

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:**

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

### **Eye Contact:**

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy 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.

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.

### **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 ATE20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Methyl Acetate	Dermal	Rat	LD50 > 2,000 mg/kg
Methyl Acetate	Inhalation- Vapor (4 hours)	Rat	LC50 > 49 mg/l
Methyl Acetate	Ingestion	Rat	LD50 > 5,000 mg/kg
Dimethyl Ether	Inhalation- Gas (4 hours)	Rat	LC50 164,000 ppm
Cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
Cyclohexane	Inhalation- Vapor (4 hours)	Rat	LC50 > 32.9 mg/l
Cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation- Vapor (4 hours)	Rat	LC50 30 mg/l
Toluene	Ingestion	Rat	LD50 5,550 mg/kg
Non-hazardous components (NJTS Reg. No. 04499600-6698)	Dermal		LD50 estimated to be > 5,000 mg/kg
Non-hazardous components (NJTS Reg. No. 04499600-6698)	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Naphthol Spirits	Inhalation- Vapor		LC50 estimated to be 20 - 50 mg/l
Naphthol Spirits	Dermal	Rabbit	LD50 > 3,000 mg/kg
Naphthol Spirits	Ingestion	Rat	LD50 > 5,000 mg/kg
Rosin	Dermal	Rabbit	LD50 > 2,500 mg/kg
Rosin	Ingestion	Rat	LD50 7,600 mg/kg
Zinc Oxide	Dermal		LD50 estimated to be > 5,000 mg/kg

Zinc Oxide	Inhalation-	Rat	LC50 > 5.7 mg/l
	Dust/Mist		
	(4 hours)		
Zinc Oxide	Ingestion	Rat	LD50 > 5,000 mg/kg

 $<sup>\</sup>overline{ATE}$  = acute toxicity estimate

# **Skin Corrosion/Irritation**

Name	Species	Value
Methyl Acetate	Rabbit	No significant irritation
Cyclohexane	Rabbit	Mild irritant
Toluene	Rabbit	Irritant
Naphthol Spirits	Rabbit	Irritant
Rosin	Rabbit	No significant irritation
Zinc Oxide	Human	No significant irritation
	and	
	animal	

**Serious Eye Damage/Irritation** 

Name	Species	Value
Methyl Acetate	Rabbit	Moderate irritant
Cyclohexane	Rabbit	Mild irritant
Toluene	Rabbit	Moderate irritant
Naphthol Spirits	Rabbit	No significant irritation
Rosin	Rabbit	Mild irritant
Zinc Oxide	Rabbit	Mild irritant

# **Skin Sensitization**

Name	Species	Value
Methyl Acetate	Human	Not classified
Toluene	Guinea	Not classified
	pig	
Naphthol Spirits	Guinea	Not classified
	pig	
Rosin	Guinea	Sensitizing
	pig	
Zinc Oxide	Guinea	Not classified
	pig	

**Respiratory Sensitization** 

Name	Species	Value
Rosin	Human	Not classified

**Germ Cell Mutagenicity** 

Name	Route	Value
Methyl Acetate	In Vitro	Not mutagenic
Methyl Acetate	In vivo	Not mutagenic
Dimethyl Ether	In Vitro	Not mutagenic
Dimethyl Ether	In vivo	Not mutagenic
Cyclohexane	In Vitro	Not mutagenic
Cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Naphthol Spirits	In vivo	Not mutagenic
Naphthol Spirits	In Vitro	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

Carcinogenicity

Name	Route	Species	Value
Dimethyl Ether	Inhalation	Rat	Not carcinogenic
Toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Naphthol Spirits	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Naphthol Spirits	Inhalation	Human and animal	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
Dimethyl Ether	Inhalation	Not classified for development	Rat	NOAEL 40,000 ppm	during organogenesis
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
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
Naphthol Spirits	Inhalation	Not classified for development	Rat	NOAEL 2.4 mg/l	during organogenesis
Zinc Oxide	Ingestion	Not classified for reproduction and/or development	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation

# Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Methyl Acetate	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Methyl Acetate	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	
Methyl Acetate	Inhalation	blindness	Not classified		NOAEL Not available	
Methyl Acetate	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Dimethyl Ether	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 10,000 ppm	30 minutes
Dimethyl Ether	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 100,000 ppm	5 minutes

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	
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
Naphthol Spirits	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Naphthol Spirits	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Naphthol Spirits	Inhalation	nervous system	Not classified	Dog	NOAEL 6.5 mg/l	4 hours
Naphthol Spirits	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure** 

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Methyl Acetate	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	28 days
Methyl Acetate	Inhalation	endocrine system   hematopoietic system   liver   immune system   kidney and/or bladder	Not classified	Rat	NOAEL 6.1 mg/l	28 days
Dimethyl Ether	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 25,000 ppm	2 years
Dimethyl Ether	Inhalation	liver	Not classified	Rat	NOAEL 20,000 ppm	30 weeks
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
Toluene	Inhalation	auditory system   nervous system   eyes   olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
Toluene	Inhalation	heart   liver   kidney and/or bladder	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks

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Toluene	Inhalation	endocrine system	Not classified	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system   vascular system	Not classified	Human	NOAEL Not available	occupational exposure
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
Toluene	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	liver   kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Not classified	Mouse	NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	Not classified	Mouse	NOAEL 105 mg/kg/day	28 days
Toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105 mg/kg/day	4 weeks
Naphthol Spirits	Inhalation	nervous system	Not classified	Rat	LOAEL 4.6 mg/l	6 months
Naphthol Spirits	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.9 mg/l	13 weeks
Naphthol Spirits	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.6 mg/l	90 days
Naphthol Spirits	Inhalation	bone, teeth, nails, and/or hair   blood   liver   muscles	Not classified	Rat	NOAEL 5.6 mg/l	12 weeks
Naphthol Spirits	Inhalation	heart	Not classified	Multiple animal species	NOAEL 1.3 mg/l	90 days
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

**Aspiration Hazard** 

Name	Value
Cyclohexane	Aspiration hazard
Toluene	Aspiration hazard
Naphthol Spirits	Aspiration hazard

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

# **SECTION 12: Ecological information**

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

# 12.1. Toxicity

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Methyl Acetate	79-20-9	Water flea	Experimental	48 hours	Effect Concentration 50%	1,026.7 mg/l
Methyl Acetate	79-20-9	Green algae	Experimental	72 hours	Effect Concentration 50%	>120 mg/l
Methyl Acetate	79-20-9	Green algae	Experimental	72 hours	No obs Effect Conc	120 mg/l
Dimethyl Ether	115-10-6	Water flea	Experimental	48 hours	Effect Concentration 50%	>4,400 mg/l
Dimethyl Ether	115-10-6	Guppy	Experimental	96 hours	Lethal Concentration 50%	>4,100 mg/l
Non-hazardous components (NJTS Reg. No. 04499600- 6698)	Trade Secret		Data not available or insufficient for classification			
Cyclohexane	110-82-7	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	4.53 mg/l
Cyclohexane	110-82-7	Water flea	Experimental	48 hours	Effect Concentration 50%	0.9 mg/l
Toluene	108-88-3	Fish other	Experimental	96 hours	Lethal Concentration 50%	6.41 mg/l
Toluene	108-88-3	Coho Salmon	Experimental	96 hours	Lethal Concentration 50%	5.5 mg/l
Toluene	108-88-3	Water flea	Experimental	48 hours	Effect Concentration 50%	3.78 mg/l
Toluene	108-88-3	Green Algae	Experimental	72 hours	Effect Concentration 50%	12.5 mg/l
Toluene	108-88-3	Coho salmon	Experimental	40 days	No obs Effect Conc	1.39 mg/l
Toluene	108-88-3	Water flea	Experimental	7 days	No obs Effect Conc	0.74 mg/l
Naphthol Spirits	64742-48-9	Water flea	Estimated	48 hours	Effect Level 50%	4.5 mg/l
Naphthol Spirits	64742-48-9	Fathead Minnow	Estimated	96 hours	Lethal Level 50%	8.2 mg/l
Naphthol Spirits	64742-48-9	Green Algae	Estimated	72 hours	Effect Level 50%	3.1 mg/l
Naphthol Spirits	64742-48-9	Green Algae	Estimated	72 hours	No obs Effect Level	0.5 mg/l
Naphthol Spirits	64742-48-9	Water flea	Estimated	21 days	No obs Effect Level	2.6 mg/l
Zinc Oxide	1314-13-2	Rainbow Trout	Estimated	96 hours	Lethal Concentration 50%	0.21 mg/l
Zinc Oxide	1314-13-2	Crustecea other	Experimental	24 hours	Lethal Concentration 50%	0.24 mg/l
Zinc Oxide	1314-13-2	Green Algae	Experimental	72 hours	Effect Concentration 50%	0.057 mg/l
Zinc Oxide	1314-13-2	Rainbow Trout	Estimated	30 days	No obs Effect Conc	0.049 mg/l
Zinc Oxide	1314-13-2	Algae or other aquatic plants	Estimated	96 hours	Effect Concentration 10%	0.026 mg/l
Zinc Oxide	1314-13-2	Crustecea other	Estimated	24 days	No obs Effect Conc	0.007 mg/l
Rosin	8050-09-7	Green Algae	Experimental	72 hours	Effect Level 50%	>100 mg/l
Rosin	8050-09-7	Water flea	Experimental	48 hours	Effect Level 50%	911 mg/l
Rosin	8050-09-7	Zebra Fish	Experimental	96 hours	Lethal Level 50%	>1 mg/l
Rosin	8050-09-7	Green Algae	Experimental	72 hours	No obs Effect Level	>100 mg/l

# 12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol

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Methyl Acetate	79-20-9	Experimental	28 days	Biological Oxygen	70 % weight	OECD 301D - Closed Bottle
		Biodegradation		Demand		Test
Dimethyl Ether	115-10-6	Experimental		Photolytic half-life	12.4 days (t	Other methods
		Photolysis		(in air)	1/2)	
Dimethyl Ether	115-10-6	Experimental	28 days	Biological Oxygen	5 % weight	OECD 301D - Closed Bottle
-		Biodegradation		Demand		Test
Non-hazardous components	Trade Secret	Data not available	N/A	N/A	N/A	N/A
(NJTS Reg. No. 04499600-		or insufficient for				
6698)		classification				
Cyclohexane	110-82-7	Experimental	28 days	Biological Oxygen	77 %	OECD 301F - Manometric
		Biodegradation		Demand	BOD/ThBOD	Respiro
Cyclohexane	110-82-7	Experimental		Photolytic half-life	4.14 days (t	Other methods
		Photolysis		(in air)	1/2)	
Toluene	108-88-3	Experimental	20 days	Biological Oxygen	80 % weight	
		Biodegradation		Demand		
Toluene	108-88-3	Experimental		Photolytic half-life	5.2 days (t 1/2)	Other methods
		Photolysis		(in air)		
Naphthol Spirits	64742-48-9	Estimated	28 days	Biological Oxygen	10 %	OECD 301D - Closed Bottle
		Biodegradation		Demand	BOD/ThBOD	Test
Zinc Oxide	1314-13-2	Data not available	N/A	N/A	N/A	N/A
		or insufficient for				
		classification				
Rosin	8050-09-7	Experimental	28 days	Carbon dioxide	64 % weight	OECD 301B - Mod. Sturm or
		Biodegradation		evolution		CO2

# 12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Methyl Acetate	79-20-9	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.18	Other methods
Dimethyl Ether	115-10-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Non-hazardous components (NJTS Reg. No. 04499600-6698)	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Cyclohexane	110-82-7	Experimental BCF- Carp	56 days	Bioaccumulation Factor	129	OECD 305E-Bioaccum Fl-thru fis
Toluene	108-88-3	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	2.73	Other methods
Naphthol Spirits	64742-48-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Zinc Oxide	1314-13-2	Experimental BCF- Carp	56 days	Bioaccumulation Factor	≤217	OECD 305E-Bioaccum Fl-thru fis
Rosin	8050-09-7	Estimated BCF - Rainbow Tr	20 days	Bioaccumulation Factor	129	Other methods

# 12.4. Mobility in soil

Please contact manufacturer for more details

# 12.5. Results of the PBT and vPvB assessment

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

# 12.6. Other adverse effects

No information available

# **SECTION 13: Disposal considerations**

# 13.1 Waste treatment methods

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

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

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/CE and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor

# EU waste code (product as sold)

080409\* Waste adhesives and sealants containing organic solvents or other dangerous substances

200127\* Paint, inks, adhesives and resins containing dangerous substances

# **SECTION 14: Transportation information**

ADR: UN1950; Aerosols; 2.1; (E); 5F. IMDG: UN1950; Aerosols; 2.1; EMS: FD, SU. IATA: UN1950; Aerosols, Flammable; 2.1.

# **SECTION 15: Regulatory information**

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

# Carcinogenicity

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>	<u>Regulation</u>
Toluene	108-88-3	Gr. 3: Not classifiable	International Agency
			for Research on Cancer

# Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory.

# **SECTION 16: Other information**

# List of relevant H statements

EUH066	Repeated exposure may cause skin dryness or cracking.
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapor.
H229	Pressurized container. may burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### **Revision information:**

Section 02: CLP Ingredient table information was modified.

Section 02: Label Elements: CLP Classification information was modified.

Section 02: Label Elements: CLP Percent Unknown information was modified.

Section 02: Label Elements: CLP Precautionary - General information was deleted.

Section 02: Label Elements: CLP Precautionary - Response information was added.

Section 02: Label Elements: CLP Target Organ Hazard Statement information was deleted.

Section 03: Composition/ Information of ingredients table information was modified.

Section 03: Reference to Section 015 for Nota info information was deleted.

Section 05: Hazardous combustion products table information was modified.

Section 06: Accidental release clean-up information information was modified.

Section 07: Precautions safe handling information information was modified.

Section 08: glove data value information was deleted.

Section 08: Occupational exposure limit table information was modified.

Section 08: Skin protection - recommended gloves information information was added.

Section 09: Evaporation Rate information information was modified.

Section 09: Flash point information information was modified.

Section 09: Property description for optional properties information was added.

Section 09: Property description for optional properties information was deleted.

Section 09: Relative density information information was modified.

Section 09: Vapor density value information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Aspiration Hazard Table information was modified.

Section 11: Carcinogenicity Table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Respiratory Sensitization Table information was modified.

Section 11: Serious Eye Damage/Irritation Table information was modified.

Section 11: Skin Corrosion/Irritation Table information was modified.

Section 11: Skin Sensitization Table information was modified.

Section 11: Target Organs - Repeated Table information was modified.

Section 11: Target Organs - Single Table information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

Section 13: Standard Phrase Category Waste GHS information was modified.

Section 15: 15.2. Chemical Safety Assessment information was deleted.

Section 15: Chemical Safety Assessment information was deleted.

Section 15: Regulations - Inventories information was modified.

Section 16: Two-column table displaying the unique list of H Codes and statements (std phrses) for all components of the given material. information was modified.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the

# product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. 3M Israel SDSs are available at www.3M.com/il