



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Regulations.

SECTION 1: Identification

1.1. Product identifier

3M™ Polyurethane Sealant 540 (Various Colours)

Product Identification Numbers

62-5261-5230-1	62-5261-5231-9	62-5261-5235-0	62-5261-5236-8	62-5263-5230-7
62-5263-5231-5	62-5263-5235-6	62-5263-5236-4	62-5484-3530-4	62-5484-3531-2
62-5484-3532-0	62-5484-3533-8	62-5484-3930-6	62-5484-3931-4	62-5484-3932-2
62-5484-3936-3	62-5484-3937-1	62-5484-3938-9	62-5484-5230-9	62-5484-5231-7
62-5484-5232-5	62-5484-5235-8	62-5484-5236-6	62-5484-5237-4	62-5484-5238-2
62-5484-8530-9	62-5484-8531-7	62-5484-9531-6	62-5485-3530-1	62-5485-3531-9
62-5485-3532-7	62-5485-3535-0	62-5485-3536-8	62-5485-3537-6	62-5485-3930-3
62-5485-3931-1	62-5485-3932-9	62-5485-3933-7	62-5485-3935-2	62-5485-3936-0
62-5485-3937-8	62-5485-3938-6	62-5485-5230-6	62-5485-5231-4	62-5485-5232-2
62-5485-5235-5	62-5485-5236-3	62-5485-5237-1	62-5485-5238-9	62-5485-8530-6
62-5485-8531-4	62-5485-9530-5	62-5485-9531-3	62-5485-9532-1	62-5486-3530-9
62-5486-3531-7	62-5486-3532-5	62-5486-3930-1	62-5486-3931-9	62-5486-3932-7
62-5486-3933-5	62-5486-3936-8	62-5486-3937-6	62-5486-5230-4	62-5486-5231-2
62-5486-5232-0	62-5486-5235-3	62-5486-5236-1	62-5486-5237-9	62-5486-5238-7
62-5486-8530-4	62-5486-8531-2	62-5486-9530-3	62-5486-9531-1	DS-2729-9107-8
DS-2729-9108-6	DS-2729-9138-3	DS-2729-9139-1	DS-2729-9143-3	DS-2729-9144-1
DS-2729-9147-4	DS-2729-9148-2	DS-2729-9151-6	DS-2729-9152-4	FI-3000-0000-2
FI-3000-0005-1	FI-3000-0008-5	FI-3000-0148-9	FI-3000-0149-7	FI-3000-0150-5
FI-3000-0151-3	FI-3000-0152-1	FI-3000-0153-9	FI-3000-0154-7	FI-3000-0155-4
FI-3000-0156-2	FI-3000-0177-8	FI-3000-0270-1	FI-3000-0304-8	FI-3000-0305-5
FI-3000-0418-6	FI-3000-7777-8	GT-5000-9014-4	GT-5000-9015-1	GT-5000-9016-9
GT-5000-9017-7	GT-5000-9018-5	HB-0040-9062-5	HB-0040-9071-6	HB-0040-9978-2
HB-0040-9980-8	HB-0040-9981-6	HB-0040-9982-4	HB-0040-9983-2	HB-0040-9984-0
HB-0040-9985-7	HB-0041-0101-8	HB-0041-0102-6	HB-0041-0103-4	HB-0041-0104-2
HB-0041-0105-9	HB-0041-0106-7	HB-0041-0107-5	HB-0041-0108-3	HB-0041-0109-1
HB-0041-0295-8	HB-0041-4883-7	HB-0041-4884-5	HB-0041-5119-5	HB-0041-5120-3
HB-0041-5182-3	HB-0041-5447-0	HB-0041-5448-8	HB-0041-5449-6	HB-0041-5463-7
HB-0041-5464-5	HB-0041-9896-4	JS-3000-5081-7	KS-9990-0648-3	KS-9990-0649-1
KS-9990-0650-9	KS-9990-0651-7	KS-9990-0652-5	XS-0024-0100-7	

1.2. Recommended use and restrictions on use

Intended Use

Adhesive

Specific Use

General purpose adhesive sealant

Restrictions on use

Not applicable

1.3. Supplier's details

Company: 3M Canada Company
Division: Industrial Adhesives and Tapes Division
Address: 1840 Oxford Street East, Post Office Box 5757, London, Ontario N6A 4T1
Telephone: (800) 364-3577
Website: www.3M.ca

1.4. Emergency telephone number

Medical Emergency Telephone: 1-800-3M HELPS / 1-800-364-3577; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Respiratory Sensitizer: Category 1.

Skin Sensitizer: Category 1.

Carcinogenicity: Category 2.

Specific Target Organ Toxicity (single exposure): Category 1.

Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements**Signal word**

Danger

Symbols

Exclamation mark | Health Hazard |

Pictograms**Hazard statements**

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. 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**Prevention:**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not

breathe dust/fume/gas/mist/vapours/spray. In case of inadequate ventilation wear respiratory protection. Wear protective gloves. Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF exposed or concerned: Get medical advice/attention.

Storage:

Store locked up.

Disposal:

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

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt	Common Name
Polyurethane Polymer	Trade Secret	25 - 60	Not Applicable
Plasticizer Mixture	Trade Secret	20 - 40	Not Applicable
Poly(Vinyl Chloride)	9002-86-2	20 - 40	Ethene, chloro-, homopolymer
Xylene	1330-20-7	3 - 7 Trade Secret *	Dimethylbenzene
Calcium Oxide	1305-78-8	< 5	Calcium oxide (CaO)
Hydrotreated Light Petroleum Distillates	64742-47-8	< 5	No Data Available
Iron Oxide (Fe ₃ O ₄)	1317-61-9	< 5	Iron oxide (Fe ₃ O ₄)
Titanium Dioxide	13463-67-7	< 5	Titanium oxide (TiO ₂)
Ethylbenzene	100-41-4	0.1 - 1.5 Trade Secret *	Benzene, ethyl-
p,p'-Methylenebis(phenyl isocyanate)	101-68-8	0.1 - 1 Trade Secret *	Benzene, 1,1'-methylenebis[4-isocyanato-
Carbon Black	1333-86-4	< 0.5	Carbon black
Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	41556-26-7	< 0.1	Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester
Methyl 1,2,2,6,6-Pentamethyl-4-piperidinyl Sebacate	82919-37-7	< 0.1	Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester

Plasticizer Mixture is a non-hazardous Trade Secret material according to WHMIS criteria.

Polyurethane Polymer is a non-hazardous Trade Secret material according to WHMIS criteria.

*The actual concentration of this ingredient has been withheld as a trade secret.

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation:**

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

Skin Contact:

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

Eye Contact:

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

If Swallowed:

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

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

Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). Allergic skin reaction (redness, swelling, blistering, and itching). Target organ effects. See Section 11 for additional details. Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

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

Not applicable

SECTION 5: Fire-fighting measures**5.1. Suitable extinguishing media**

In case of fire: Use a carbon dioxide or dry chemical extinguisher to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products**Substance**

Carbon monoxide
Carbon dioxide
Hydrogen Chloride
Hydrogen Cyanide
Oxides of Nitrogen
Oxides of Sulfur

Condition

During Combustion
During Combustion
During Combustion
During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA). 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. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. 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

Collect as much of the spilled material as possible. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Clean up residue. 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

Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/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. Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from heat. Store away from amines.

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	
p,p'-Methylenebis(phenyl isocyanate)	101-68-8	ACGIH	TWA:0.005 ppm	
Calcium Oxide	1305-78-8	ACGIH	TWA:2 mg/m3	
Xylene	1330-20-7	ACGIH	TWA:100 ppm;STEL:150 ppm	
Carbon Black	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m3	
Titanium Dioxide	13463-67-7	ACGIH	TWA:10 mg/m3	
Kerosine (petroleum)	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	SKIN
Poly(Vinyl Chloride)	9002-86-2	ACGIH	TWA(respirable fraction):1 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls**8.2.1. Engineering controls**

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/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:

Safety Glasses with side shields

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: Fluoroelastomer

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 vapours and particulates

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Specific Physical Form:	Paste
Colour	Black, Gray, White
Odour	Mild Xylene
Odour threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point/Freezing point	<i>No Data Available</i>
Boiling point	$\geq 136\text{ }^{\circ}\text{C}$
Flash Point	No flash point
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapour Pressure	<i>Not Applicable</i>
Vapour Density and/or Relative Vapour Density	<i>Not Applicable</i>
Density	1.17 g/ml
Relative density	1.17 [Ref Std: WATER=1]
Water solubility	Nil
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	$\geq 200\text{ }^{\circ}\text{C}$
Decomposition temperature	<i>No Data Available</i>
Viscosity/Kinematic Viscosity	$\geq 300,000\text{ mPa}\cdot\text{s}$ [@ 23 °C]
Volatile Organic Compounds	<i>No Data Available</i>
Percent volatile	<i>No Data Available</i>
VOC Less H₂O & Exempt Solvents	54 g/l [Test Method: tested per EPA method 24]
Molecular weight	<i>No Data Available</i>

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

10.5. Incompatible materials

Amines

Alcohols

Water

10.6. Hazardous decomposition products

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

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not 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. Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest. May cause additional health effects (see below).

Skin Contact:

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.

Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

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.

Prolonged or repeated exposure may cause target organ effects:

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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.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Carbon black	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

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
Plasticizer Mixture	Dermal	Rat	LD50 > 1,000 mg/kg
Plasticizer Mixture	Ingestion	Rat	LD50 > 5,000 mg/kg
Poly(Vinyl Chloride)	Dermal		LD50 estimated to be > 5,000 mg/kg
Poly(Vinyl Chloride)	Ingestion		LD50 estimated to be > 5,000 mg/kg
Xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
Xylene	Inhalation-Vapor (4 hours)	Rat	LC50 29 mg/l
Xylene	Ingestion	Rat	LD50 3,523 mg/kg
Titanium Dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium Dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium Dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Calcium Oxide	Ingestion	Rat	LD50 > 2,500 mg/kg
Calcium Oxide	Dermal	similar compounds	LD50 > 2,500 mg/kg
Hydrotreated Light Petroleum Distillates	Inhalation-Vapor	Professional judgement	LC50 estimated to be 20 - 50 mg/l
Hydrotreated Light Petroleum Distillates	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydrotreated Light Petroleum Distillates	Ingestion	Rat	LD50 > 5,000 mg/kg
Ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
Ethylbenzene	Inhalation-Vapor (4 hours)	Rat	LC50 17.4 mg/l
Ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg
p,p'-Methylenebis(phenyl isocyanate)	Dermal	Rabbit	LD50 > 5,000 mg/kg
p,p'-Methylenebis(phenyl isocyanate)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l
p,p'-Methylenebis(phenyl isocyanate)	Ingestion	Rat	LD50 31,600 mg/kg
Carbon Black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon Black	Ingestion	Rat	LD50 > 8,000 mg/kg
Iron Oxide (Fe3O4)	Dermal	Not available	LD50 3,100 mg/kg

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Iron Oxide (Fe ₃ O ₄)	Ingestion	Not available	LD50 3,700 mg/kg
Bis(1,2,2,6,6-pentamethyl-4-piperidiny)l sebacate	Dermal	Professional judgement	LD50 estimated to be 2,000 - 5,000 mg/kg
Bis(1,2,2,6,6-pentamethyl-4-piperidiny)l sebacate	Ingestion	Rat	LD50 3,125 mg/kg
Methyl 1,2,2,6,6-Pentamethyl-4-piperidiny)l Sebacate	Dermal	Professional judgement	LD50 estimated to be 2,000 - 5,000 mg/kg
Methyl 1,2,2,6,6-Pentamethyl-4-piperidiny)l Sebacate	Ingestion	Rat	LD50 3,125 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Poly(Vinyl Chloride)	Professional judgement	No significant irritation
Xylene	Rabbit	Mild irritant
Titanium Dioxide	Rabbit	No significant irritation
Calcium Oxide	Human	Corrosive
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Mild irritant
p,p'-Methylenebis(phenyl isocyanate)	official classification	Irritant
Carbon Black	Rabbit	No significant irritation
Iron Oxide (Fe ₃ O ₄)	Rabbit	No significant irritation
Bis(1,2,2,6,6-pentamethyl-4-piperidiny)l sebacate	Rabbit	Minimal irritation
Methyl 1,2,2,6,6-Pentamethyl-4-piperidiny)l Sebacate	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
Overall product	Rabbit	Mild irritant
Xylene	Rabbit	Mild irritant
Titanium Dioxide	Rabbit	No significant irritation
Calcium Oxide	Rabbit	Corrosive
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Moderate irritant
p,p'-Methylenebis(phenyl isocyanate)	official classification	Severe irritant
Carbon Black	Rabbit	No significant irritation
Iron Oxide (Fe ₃ O ₄)	Rabbit	No significant irritation
Bis(1,2,2,6,6-pentamethyl-4-piperidiny)l sebacate	Rabbit	Mild irritant
Methyl 1,2,2,6,6-Pentamethyl-4-piperidiny)l Sebacate	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Titanium Dioxide	Human and animal	Not classified
Hydrotreated Light Petroleum Distillates	Guinea pig	Not classified
Ethylbenzene	Human	Not classified
p,p'-Methylenebis(phenyl isocyanate)	official classification	Sensitizing
Iron Oxide (Fe ₃ O ₄)	Human	Not classified
Bis(1,2,2,6,6-pentamethyl-4-piperidiny)l sebacate	Guinea	Sensitizing

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	pig	
Methyl 1,2,2,6,6-Pentamethyl-4-piperidinyI Sebacate	Guinea pig	Sensitizing

Respiratory Sensitization

Name	Species	Value
p,p'-Methylenebis(phenyl isocyanate)	Human	Sensitizing

Germ Cell Mutagenicity

Name	Route	Value
Poly(Vinyl Chloride)	In Vitro	Not mutagenic
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic
Calcium Oxide	In Vitro	Not mutagenic
Hydrotreated Light Petroleum Distillates	In Vitro	Not mutagenic
Hydrotreated Light Petroleum Distillates	In vivo	Not mutagenic
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
p,p'-Methylenebis(phenyl isocyanate)	In Vitro	Some positive data exist, but the data are not sufficient for classification
Carbon Black	In Vitro	Not mutagenic
Carbon Black	In vivo	Some positive data exist, but the data are not sufficient for classification
Iron Oxide (Fe3O4)	In Vitro	Not mutagenic
Bis(1,2,2,6,6-pentamethyl-4-piperidinyI) sebacate	In vivo	Not mutagenic
Bis(1,2,2,6,6-pentamethyl-4-piperidinyI) sebacate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Methyl 1,2,2,6,6-Pentamethyl-4-piperidinyI Sebacate	In vivo	Not mutagenic
Methyl 1,2,2,6,6-Pentamethyl-4-piperidinyI Sebacate	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Poly(Vinyl Chloride)	Not Specified	Rat	Some positive data exist, but the data are not sufficient for classification
Xylene	Dermal	Rat	Not carcinogenic
Xylene	Ingestion	Multiple animal species	Not carcinogenic
Xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
Titanium Dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Dioxide	Inhalation	Rat	Carcinogenic
Hydrotreated Light Petroleum Distillates	Not Specified	Not available	Not carcinogenic
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic
p,p'-Methylenebis(phenyl isocyanate)	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Carbon Black	Dermal	Mouse	Not carcinogenic
Carbon Black	Ingestion	Mouse	Not carcinogenic
Carbon Black	Inhalation	Rat	Carcinogenic
Iron Oxide (Fe3O4)	Inhalation	Human	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
Poly(Vinyl Chloride)	Not Specified	Not classified for development	Mouse	NOAEL Not available	during gestation
Xylene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
Xylene	Ingestion	Not classified for development	Mouse	NOAEL Not available	during organogenesis
Xylene	Inhalation	Not classified for development	Multiple animal species	NOAEL Not available	during gestation
Hydrotreated Light Petroleum Distillates	Not Specified	Not classified for female reproduction	Rat	NOAEL Not available	1 generation
Hydrotreated Light Petroleum Distillates	Not Specified	Not classified for male reproduction	Rat	NOAEL Not available	1 generation
Hydrotreated Light Petroleum Distillates	Not Specified	Not classified for development	Rat	NOAEL Not available	1 generation
Ethylbenzene	Inhalation	Not classified for development	Rat	NOAEL 4.3 mg/l	premating & during gestation
p,p'-Methylenebis(phenyl isocyanate)	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis
Bis(1,2,2,6,6-pentamethyl-4-piperidiny) sebacate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,493 mg/kg/day	29 days
Bis(1,2,2,6,6-pentamethyl-4-piperidiny) sebacate	Ingestion	Not classified for development	Rat	NOAEL 209 mg/kg/day	premating into lactation
Bis(1,2,2,6,6-pentamethyl-4-piperidiny) sebacate	Ingestion	Toxic to female reproduction	Rat	NOAEL 804 mg/kg/day	premating into lactation
Methyl 1,2,2,6,6-Pentamethyl-4-piperidiny) Sebacate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,493 mg/kg/day	29 days
Methyl 1,2,2,6,6-Pentamethyl-4-piperidiny) Sebacate	Ingestion	Not classified for development	Rat	NOAEL 209 mg/kg/day	premating into lactation
Methyl 1,2,2,6,6-Pentamethyl-4-piperidiny) Sebacate	Ingestion	Toxic to female reproduction	Rat	NOAEL 804 mg/kg/day	premating into lactation

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
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	not applicable

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					mg/kg	
Calcium Oxide	Inhalation	respiratory irritation	May cause respiratory irritation	Not available	NOAEL Not available	occupational exposure
Ethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Ethylbenzene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
p,p'-Methylenebis(phenyl isocyanate)	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Poly(Vinyl Chloride)	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.013 mg/l	22 months
Xylene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/l	4 weeks
Xylene	Inhalation	auditory system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 7.8 mg/l	5 days
Xylene	Inhalation	liver	Not classified	Multiple animal species	NOAEL Not available	
Xylene	Inhalation	heart endocrine system gastrointestinal tract hematopoietic system muscles kidney and/or bladder respiratory system	Not classified	Multiple animal species	NOAEL 3.5 mg/l	13 weeks
Xylene	Ingestion	auditory system	Not classified	Rat	NOAEL 900 mg/kg/day	2 weeks
Xylene	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 1,500 mg/kg/day	90 days
Xylene	Ingestion	liver	Not classified	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system nervous system respiratory system	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Titanium Dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium Dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
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	103 weeks

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					mg/l	
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
p,p'-Methylenebis(phenyl isocyanate)	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
Carbon Black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
Iron Oxide (Fe ₃ O ₄)	Inhalation	pulmonary fibrosis pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
Bis(1,2,2,6,6-pentamethyl-4-piperidiny) sebacate	Ingestion	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 300 mg/kg/day	28 days
Bis(1,2,2,6,6-pentamethyl-4-piperidiny) sebacate	Ingestion	gastrointestinal tract liver immune system heart endocrine system hematopoietic system nervous system kidney and/or bladder	Not classified	Rat	NOAEL 1,493 mg/kg/day	29 days
Methyl 1,2,2,6,6-Pentamethyl-4-piperidiny Sebacate	Ingestion	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 300 mg/kg/day	28 days
Methyl 1,2,2,6,6-Pentamethyl-4-piperidiny Sebacate	Ingestion	gastrointestinal tract liver immune system heart endocrine system hematopoietic system nervous system kidney and/or bladder	Not classified	Rat	NOAEL 1,493 mg/kg/day	29 days

Aspiration Hazard

Name	Value
Xylene	Aspiration hazard
Hydrotreated Light Petroleum Distillates	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

No data available.

SECTION 13: Disposal considerations**13.1. Disposal methods**

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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.

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

Global inventory status

Contact manufacturer 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 Japan Chemical Substance Control Law. 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. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. 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.

SECTION 16: Other information

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.

Health: 2 Flammability: 1 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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3M Canada SDSs are available at www.3M.ca

