



## Safety Data Sheet

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### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Detector Loop Sealant Black 5000

#### Product Identification Numbers

78-8072-0724-2, 78-8095-4061-6, 78-8095-4063-2, 78-8118-6302-2  
7000042538, 7000056794

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Detector loop sealant (to fill saw cuts after installation of a vehicle detector loop), Detector loop sealant for roadways

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Automotive Aftermarket
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	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 3.  
Serious Eye Damage/Irritation: Category 2B.  
Respiratory Sensitizer: Category 1A.  
Skin Sensitizer: Category 1A.  
Reproductive Toxicity: Category 1B.  
Carcinogenicity: Category 1B.  
Specific Target Organ Toxicity (repeated exposure): Category 1.

#### 2.2. Label elements

##### Signal word

Danger

**Symbols**

Flame | Health Hazard |

**Pictograms****Hazard Statements**

Flammable liquid and vapor.

Causes eye irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
May damage fertility or the unborn child.  
May cause cancer.

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

**Precautionary Statements****Prevention:**

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

**Response:**

IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.  
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.  
Store locked up.

**Disposal:**

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

**Supplemental Information:**

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

25% of the mixture consists of ingredients of unknown acute oral toxicity.

20% of the mixture consists of ingredients of unknown acute inhalation toxicity.

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

Ingredient	C.A.S. No.	% by Wt
Talc	14807-96-6	15 - 40 Trade Secret *
1-Methoxy-2-propyl acetate	108-65-6	10 - 30 Trade Secret *
Benzene, 1,3-diisocyanatomethyl-, polymer with .alpha.,.alpha.',.alpha."-1,2,3-propanetriyltris[.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)]]	39279-01-1	10 - 30 Trade Secret *
Polystyrene	9003-53-6	10 - 30 Trade Secret *
Polypropylene Glycol-Toluene Diisocyanate Polymer	9057-91-4	5 - 10 Trade Secret *
Glycerol Poly(Oxypropylene) Ether-Polypropylene Glycol-Tolylene Diisocyanate Polymer	57451-08-8	3 - 7 Trade Secret *
Dimethyl siloxane, reaction product with silica	67762-90-7	1 - 5 Trade Secret *
Synthetic amorphous silica, fumed, crystalline free	112945-52-5	1 - 5 Trade Secret *
Carbon black	1333-86-4	0.1 - 1 Trade Secret *
Dibutyltin Dilaurate	77-58-7	0.1 - 1 Trade Secret *
Toluene	108-88-3	< 0.4 Trade Secret *
Toluene 2,4-Diisocyanate	584-84-9	<= 0.1 Trade Secret *
Toluene 2,6-Diisocyanate	91-08-7	<= 0.1 Trade Secret *

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

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

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

**Skin Contact:**

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

**Eye Contact:**

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**

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

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

Not applicable

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

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

**5.2. Special hazards arising from the substance or mixture**

Closed containers exposed to heat from fire may build pressure and explode.

**Hazardous Decomposition or By-Products****Substance**

Aldehydes  
Isocyanates  
Carbon monoxide  
Carbon dioxide  
Hydrogen Cyanide  
Oxides of Nitrogen

**Condition**

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

**5.3. Special protective actions for fire-fighters**

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

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

**6.2. Environmental precautions**

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

**6.3. Methods and material for containment and cleaning up**

Contain spill. Cover spill area with a fire-extinguishing foam. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. 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 container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Do not use in a confined area with minimal air exchange. 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. Protect from sunlight. Store away from heat. Store away from acids. Store away from oxidizing agents. 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
1-Methoxy-2-propyl acetate	108-65-6	AIHA	TWA:50 ppm	
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin, Ototoxicant
Toluene	108-88-3	OSHA	TWA:200 ppm;CEIL:300 ppm	
SILICA, AMORPHOUS	112945-52-5	OSHA	TWA:20 millions of particles/cu. ft.;TWA concentration:0.8 mg/m3	
Carbon black	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m3	A3: Confirmed animal carcin.
Carbon black	1333-86-4	OSHA	TWA:3.5 mg/m3	
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m3	A4: Not class. as human carcin
TALC	14807-96-6	OSHA	TWA - Use asbestos limits:	
Talc	14807-96-6	OSHA	TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.);TWA:20 millions of particles/cu. ft.	
Toluene 2,4-Diisocyanate	584-84-9	ACGIH	TWA(inhalable fraction and vapor):0.001 ppm;STEL(inhalable fraction and vapor):0.005 ppm	A3: Confirmed animal carcin., Dermal/Respiratory Sensitizer
Toluene 2,4-Diisocyanate	584-84-9	OSHA	CEIL:0.14 mg/m3(0.02 ppm)	
SILICA, AMORPHOUS	67762-90-7	OSHA	TWA:20 millions of particles/cu. ft.;TWA concentration:0.8 mg/m3	
TIN, ORGANIC COMPOUNDS	77-58-7	ACGIH	TWA(as Sn):0.1	A4: Not class. as human

			mg/m3;STEL(as Sn):0.2 mg/m3	carcin, SKIN
TIN, ORGANIC COMPOUNDS	77-58-7	OSHA	TWA(as Sn):0.1 mg/m3	
Toluene 2,6-Diisocyanate	91-08-7	ACGIH	TWA(inhalable fraction and vapor):0.001 ppm;STEL(inhalable fraction and vapor):0.005 ppm	A3: Confirmed animal carcin., Dermal/Respiratory Sensitizer

ACGIH : American Conference of Governmental Industrial Hygienists  
 AIHA : American Industrial Hygiene Association  
 CMRG : Chemical Manufacturer's Recommended Guidelines  
 OSHA : United States Department of Labor - Occupational Safety and Health Administration  
 TWA: Time-Weighted-Average  
 STEL: Short Term Exposure Limit  
 CEIL: Ceiling

**8.2. Exposure controls**

**8.2.1. Engineering controls**

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

**8.2.2. Personal protective equipment (PPE)**

**Eye/face protection**

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

Indirect Vented Goggles

**Skin/hand protection**

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

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

Fluoroelastomer  
 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 – Butyl 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:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors 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**

<b>Appearance</b>	
Physical state	Liquid
Color	Black
<b>Odor</b>	Mild Odor
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	>=284 °F
<b>Flash Point</b>	114 °F [ <i>Test Method</i> :Tagliabue Closed Cup]
<b>Evaporation rate</b>	0.21 [ <i>Ref Std</i> :BUOAC=1]
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	<=3.7 mmHg [@ 68 °F]
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Density</b>	1.23 g/ml [@ 20 °C]
<b>Specific Gravity</b>	0.97 [ <i>Ref Std</i> :WATER=1]
<b>Solubility in Water</b>	Nil
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	25,000 centipoise
<b>Hazardous Air Pollutants</b>	0.11 lb HAPS/lb solids [ <i>Test Method</i> :Calculated]
<b>Volatile Organic Compounds</b>	232 g/l [ <i>Test Method</i> :calculated SCAQMD rule 443.1]
<b>Volatile Organic Compounds</b>	18.8 % weight [ <i>Test Method</i> :calculated per CARB title 2]
<b>Percent volatile</b>	18.8 % weight
<b>VOC Less H2O &amp; Exempt Solvents</b>	232 g/l [ <i>Test Method</i> :calculated SCAQMD rule 443.1]

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Sparks and/or flames

### 10.5. Incompatible materials

Amines

### 10.6. Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

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

#### Inhalation:

May be harmful if inhaled.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Allergic Respiratory Reaction: 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:

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:

#### Prolonged or repeated exposure may cause target organ effects:

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

#### 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
Generic: CAS NO S14807966D	14807-96-6	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Generic: Benzene, 1,3-diisocyanatomethyl-	584-84-9	Anticipated human carcinogen	National Toxicology Program Carcinogens
Generic: Benzene, 1,3-diisocyanatomethyl-	91-08-7	Anticipated human carcinogen	National Toxicology Program Carcinogens
Generic: TALC	14807-96-6	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Carbon black	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Toluene 2,4-Diisocyanate	584-84-9	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Toluene 2,6-Diisocyanate	91-08-7	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	Inhalation-Vapor(4 hr)		No data available; calculated ATE20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg
Polystyrene	Dermal	Rabbit	LD50 > 2,000 mg/kg
Polystyrene	Ingestion	Rat	LD50 > 5,000 mg/kg
1-Methoxy-2-propyl acetate	Dermal	Rabbit	LD50 > 5,000 mg/kg
1-Methoxy-2-propyl acetate	Inhalation-Vapor (4 hours)	Rat	LC50 > 28.8 mg/l
1-Methoxy-2-propyl acetate	Ingestion	Rat	LD50 8,532 mg/kg
Polypropylene Glycol-Toluene Diisocyanate Polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Polypropylene Glycol-Toluene Diisocyanate Polymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Dimethyl siloxane, reaction product with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic amorphous silica, fumed, crystalline free	Dermal	Rabbit	LD50 > 5,000 mg/kg
Dimethyl siloxane, reaction product with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Dimethyl siloxane, reaction product with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Synthetic amorphous silica, fumed, crystalline free	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic amorphous silica, fumed, crystalline free	Ingestion	Rat	LD50 > 5,110 mg/kg
Carbon black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon black	Ingestion	Rat	LD50 > 8,000 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
Dibutyltin Dilaurate	Dermal	Rat	LD50 > 2,000 mg/kg
Dibutyltin Dilaurate	Ingestion	Rat	LD50 1,290 mg/kg
Toluene 2,4-Diisocyanate	Inhalation-Vapor (4 hours)	Mouse	LC50 0.12 mg/l
Toluene 2,6-Diisocyanate	Inhalation-Vapor (4 hours)	Mouse	LC50 0.12 mg/l
Toluene 2,4-Diisocyanate	Dermal	Rabbit	LD50 > 9,400 mg/kg
Toluene 2,6-Diisocyanate	Dermal	Rabbit	LD50 > 9,400 mg/kg
Toluene 2,4-Diisocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.35 mg/l
Toluene 2,4-Diisocyanate	Ingestion	Rat	LD50 > 5,000 mg/kg
Toluene 2,6-Diisocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.35 mg/l
Toluene 2,6-Diisocyanate	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value

Talc	Rabbit	No significant irritation
Polystyrene	Professional judgement	No significant irritation
1-Methoxy-2-propyl acetate	Rabbit	No significant irritation
Polypropylene Glycol-Toluene Diisocyanate Polymer	Professional judgement	Minimal irritation
Dimethyl siloxane, reaction product with silica	Rabbit	No significant irritation
Synthetic amorphous silica, fumed, crystalline free	Rabbit	No significant irritation
Carbon black	Rabbit	No significant irritation
Toluene	Rabbit	Irritant
Dibutyltin Dilaurate	Rabbit	Corrosive
Toluene 2,4-Diisocyanate	Rabbit	Irritant
Toluene 2,6-Diisocyanate	Rabbit	Irritant

### Serious Eye Damage/Irritation

Name	Species	Value
Talc	Rabbit	No significant irritation
1-Methoxy-2-propyl acetate	Rabbit	Mild irritant
Polypropylene Glycol-Toluene Diisocyanate Polymer	Professional judgement	Mild irritant
Dimethyl siloxane, reaction product with silica	Rabbit	No significant irritation
Synthetic amorphous silica, fumed, crystalline free	Rabbit	No significant irritation
Carbon black	Rabbit	No significant irritation
Toluene	Rabbit	Moderate irritant
Dibutyltin Dilaurate	Rabbit	Corrosive
Toluene 2,4-Diisocyanate	Rabbit	Corrosive
Toluene 2,6-Diisocyanate	Rabbit	Corrosive

### Skin Sensitization

Name	Species	Value
1-Methoxy-2-propyl acetate	Guinea pig	Not classified
Polypropylene Glycol-Toluene Diisocyanate Polymer		Not classified
Dimethyl siloxane, reaction product with silica	Human and animal	Not classified
Synthetic amorphous silica, fumed, crystalline free	Human and animal	Not classified
Toluene	Guinea pig	Not classified
Dibutyltin Dilaurate	Guinea pig	Sensitizing
Toluene 2,4-Diisocyanate	Human and animal	Sensitizing
Toluene 2,6-Diisocyanate	Human and animal	Sensitizing

### Respiratory Sensitization

Name	Species	Value
Talc	Human	Not classified
Toluene 2,4-Diisocyanate	Human	Sensitizing
Toluene 2,6-Diisocyanate	Human	Sensitizing

**Germ Cell Mutagenicity**

Name	Route	Value
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
Polystyrene	In Vitro	Not mutagenic
1-Methoxy-2-propyl acetate	In Vitro	Not mutagenic
Dimethyl siloxane, reaction product with silica	In Vitro	Not mutagenic
Synthetic amorphous silica, fumed, crystalline free	In Vitro	Not mutagenic
Carbon black	In Vitro	Not mutagenic
Carbon black	In vivo	Some positive data exist, but the data are not sufficient for classification
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Dibutyltin Dilaurate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Dibutyltin Dilaurate	In vivo	Mutagenic
Toluene 2,4-Diisocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Toluene 2,6-Diisocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Polystyrene	Not Specified	Rat	Some positive data exist, but the data are not sufficient for classification
Dimethyl siloxane, reaction product with silica	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
Synthetic amorphous silica, fumed, crystalline free	Not Specified	Mouse	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
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
Toluene 2,4-Diisocyanate	Inhalation	Human and animal	Not carcinogenic
Toluene 2,4-Diisocyanate	Ingestion	Multiple animal species	Carcinogenic
Toluene 2,6-Diisocyanate	Inhalation	Human and animal	Not carcinogenic
Toluene 2,6-Diisocyanate	Ingestion	Multiple animal species	Carcinogenic

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis
1-Methoxy-2-propyl acetate	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	prematings & during gestation

1-Methoxy-2-propyl acetate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
1-Methoxy-2-propyl acetate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
1-Methoxy-2-propyl acetate	Inhalation	Not classified for development	Rat	NOAEL 21.6 mg/l	during organogenesis
Dimethyl siloxane, reaction product with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Dimethyl siloxane, reaction product with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Dimethyl siloxane, reaction product with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Synthetic amorphous silica, fumed, crystalline free	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline free	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline free	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
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
Dibutyltin Dilaurate	Ingestion	Toxic to female reproduction	Rat	NOAEL 2 mg/kg/day	prematuring into lactation
Dibutyltin Dilaurate	Ingestion	Toxic to development	Rat	NOAEL 2.5 mg/kg/day	during gestation
Toluene 2,4-Diisocyanate	Inhalation	Not classified for female reproduction	Rat	NOAEL 0.002 mg/l	2 generation
Toluene 2,4-Diisocyanate	Inhalation	Not classified for male reproduction	Rat	NOAEL 0.002 mg/l	2 generation
Toluene 2,4-Diisocyanate	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis
Toluene 2,6-Diisocyanate	Inhalation	Not classified for female reproduction	Rat	NOAEL 0.002 mg/l	2 generation
Toluene 2,6-Diisocyanate	Inhalation	Not classified for male reproduction	Rat	NOAEL 0.002 mg/l	2 generation
Toluene 2,6-Diisocyanate	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
1-Methoxy-2-propyl acetate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		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	May cause drowsiness or	Human	NOAEL Not	poisoning

		system depression	dizziness		available	and/or abuse
Dibutyltin Dilaurate	Ingestion	immune system	Causes damage to organs	Rat	LOAEL 5 mg/kg	
Toluene 2,4-Diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure
Toluene 2,6-Diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure

### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis   respiratory system	Not classified	Rat	NOAEL 18 mg/m3	113 weeks
1-Methoxy-2-propyl acetate	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 16.2 mg/l	9 days
1-Methoxy-2-propyl acetate	Inhalation	olfactory system	Not classified	Mouse	LOAEL 1.62 mg/l	9 days
1-Methoxy-2-propyl acetate	Inhalation	blood	Not classified	Multiple animal species	NOAEL 16.2 mg/l	9 days
1-Methoxy-2-propyl acetate	Ingestion	endocrine system	Not classified	Rat	NOAEL 1,000 mg/kg/day	44 days
Dimethyl siloxane, reaction product with silica	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Synthetic amorphous silica, fumed, crystalline free	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Carbon black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	auditory system   eyes   olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	nervous system	May cause damage to organs though 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
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	Inhalation	gastrointestinal tract	Not classified	Multiple animal species	NOAEL 11.3 mg/l	15 weeks
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	28 days

					mg/kg/day	
Toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105 mg/kg/day	4 weeks
Dibutyltin Dilaurate	Ingestion	liver	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 2 mg/kg/day	2 weeks
Dibutyltin Dilaurate	Ingestion	immune system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.3 mg/kg/day	28 days
Toluene 2,4-Diisocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL 0 mg/l	occupational exposure
Toluene 2,6-Diisocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL 0 mg/l	occupational exposure

**Aspiration Hazard**

Name	Value
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. 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):**

<u><b>Ingredient</b></u>	<u><b>C.A.S. No</b></u>	<u><b>% by Wt</b></u>
Toluene 2,4-Diisocyanate	584-84-9	Trade Secret <= 0.1
Toluene 2,6-Diisocyanate	91-08-7	Trade Secret <= 0.1

**This material contains a chemical which requires export notification under TSCA Section 12[b]:**

<u><b>Ingredient (Category if applicable)</b></u>	<u><b>C.A.S. No</b></u>	<u><b>Regulation</b></u>	<u><b>Status</b></u>
Toluene 2,4-Diisocyanate (Benzene, 1,3-diisocyanatomethyl-)	584-84-9	Toxic Substances Control Act (TSCA) 5 SNUR or Consent Order Chemicals	Proposed
Toluene 2,4-Diisocyanate	584-84-9	Toxic Substances Control Act (TSCA) 5 SNUR or Consent Order Chemicals	Proposed
Toluene 2,6-Diisocyanate (Benzene, 1,3-diisocyanatomethyl-)	91-08-7	Toxic Substances Control Act (TSCA) 5 SNUR or Consent Order Chemicals	Proposed
Toluene 2,6-Diisocyanate	91-08-7	Toxic Substances Control Act (TSCA) 5 SNUR or Consent Order Chemicals	Proposed

**This material contains a chemical subject to a proposed EPA Significant New Use Rule (TSCA Section 5)**

<u><b>Ingredient (Category if applicable)</b></u>	<u><b>C.A.S. No</b></u>	<u><b>Reference</b></u>
Toluene 2,4-Diisocyanate	584-84-9	80 FR 2068
Toluene 2,6-Diisocyanate	91-08-7	80 FR 2068

**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: 2 Instability: 0 Special Hazards: None**

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

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