

# **Safety Data Sheet**

Copyright, 2014, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

**Document Group:** 

09-2062-9

Version Number:

7.00

Issue Date:

08/21/14

**Supercedes Date:** 

10/10/06

# **SECTION 1: Identification**

#### 1.1. Product identifier

3MTM Detector Loop Sealant Black 5000

#### **Product Identification Numbers**

78-8110-9503-9, 78-8110-9504-7

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

#### Recommended use

Scalant. 3M<sup>TM</sup> Detector Loop Scalant is a flexible, thixotropic, one-part scalant for use in scaling saw cut gaps in roadway surfaces that contain wire loops for vehicle detection.

#### 1.3. Supplier's details

MANUFACTURER:

3M

**DIVISION:** 

Commercial Solutions Division

ADDRESS: Telephone:

3M Center, St. Paul, MN 55144-1000, USA 1-888-3M HELPS (1-888-364-3577)

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

# **SECTION 2: Hazard identification**

# 2.1. Hazard classification

Flammable Liquid: Category 3.

Acute Toxicity (inhalation): Category 4. Serious Eye Damage/Irritation: Category 2B.

Respiratory Sensitizer: Category 1A.

Skin Sensitizer: Category 1A.

Reproductive Toxicity: Category 1B.

Carcinogenicity: Category 1B.

#### 2.2. Label elements

#### Signal word

Danger

#### **Symbols**

Flame | Exclamation mark | 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.

Harmful if inhaled.

May damage fertility or the unborn child.

May cause cancer.

#### **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.

Avoid breathing fume/vapors.

Use only outdoors or in a well-ventilated area.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves and eye/face protection.

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.

Call a POISON CENTER or doctor/physician if you feel unwell.

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.

# 2.3. Hazards not otherwise classified

None.

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

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

56% 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 * |
| POLYSTYRENE   | 9003-53-6   | 10 - 30 Trade Secret * |
| Benzene, 1,3-diisocyanatomethyl-, polymer with          | 39279-01-1  | 10 - 30 Trade Secret * |
| .alpha.,.alpha.',.alpha."-1,2,3-propanetriyltris[.omega |             |                        |
| hydroxypoly[oxy(methyl-1,2-ethanediyl)]]                |             |                        |
| 1-METHOXY-2-PROPYL ACETATE                              | 108-65-6    | 10 - 30 Trade Secret * |
| URETHANE PREPOLYMER                                     | 9057-91-4   | 5 - 10 Trade Secret *  |
| GLYCEROL POLY(OXYPROPYLENE) ETHER-                      | 57451-08-8  | 3 - 7 Trade Secret *   |
| POLYPROPYLENE GLYCOL-TOLYLENE DIISOCYANATE              |             |                        |
| POLYMER   |             |                        |
| Synthetic amorphous silica, fumed, crystalline free     | 112945-52-5 | 1 - 5 Trade Secret *   |
| DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA         | 67762-90-7  | 1 - 5 Trade Secret *   |
| CARBON BLACK  | 1333-86-4   | <= 0.65 Trade Secret * |
| DIBUTYLTIN DILAURATE                                    | 77-58-7     | < 0.2 Trade Secret *   |
| TOLUENE 2,6-DIISOCYANATE                                | 91-08-7     | < 0.1 Trade Secret *   |
| TOLUENE 2,4-DIISOCYANATE                                | 584-84-9    | < 0.1 Trade Secret *   |

<sup>\*</sup>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

See Section 11.1. Information on toxicological effects.

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

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

# 5.1. Suitable extinguishing media

DO NOT USE WATER. 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          | Condition                |
|--------------------|--------------------------|
| Aldehydes          | <b>During Combustion</b> |
| Carbon monoxide    | During Combustion        |
| Carbon dioxide     | During Combustion        |
| Hydrogen Cyanide   | <b>During Combustion</b> |
| Oxides of Nitrogen | <b>During Combustion</b> |

#### 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.

# **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. 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. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Dispose of collected material as soon as possible.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

For industrial or professional use only. 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 fume/vapors. 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. 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 to prevent contamination with water or air. If contamination is suspected, do not reseal container. 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

| Ingredient  | C.A.S. No.      | Agency                  | Limit type   | Additional Comments                           |
|---|-----------------|-------------------------|--|---|
| 1-METHOXY-2-PROPYL<br>ACETATE                         | 108-65-6        | AIHA                    | TWA:50 ppm   |   |
| 1-METHOXY-2-PROPYL<br>ACETATE                         | 108-65-6        | CMRG                    | TWA:10 mg/m3;STEL:90<br>ppm  |   |
| SILICA, AMORPHOUS                                     | 112945-52-<br>5 | OSHA                    | TWA concentration:0.8 mg/m3;TWA:20 millions of particles/cu. ft.   |   |
| CARBON BLACK  | 1333-86-4       | ACGIH                   | TWA(inhalable fraction):3 mg/m3  | A3: Confirmed animal carcin.                  |
| CARBON BLACK  | 1333-86-4       | CMRG                    | TWA:0.5 mg/m3  |   |
| CARBON BLACK  | 1333-86-4       | OSHA                    | TWA:3.5 mg/m3  |   |
| TALC  | 14807-96-6      | ACGIH                   | TWA(respirable fraction):2<br>mg/m3  | A4: Not class. as human carcin                |
| TALC  | 14807-96-6      | CMRG                    | TWA(as respirable dust):0.5 mg/m3  |   |
| TALC  | 14807-96-6      | OSHA                    | TWA concentration(as total dust):0.3 mg/m3;TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.);TWA:20 millions of particles/cu. ft. |   |
| FREE ISOCYANATES                                      | 584-84-9        | Manufacturer determined | TWA:0.005 ppm;STEL:0.02  |   |
| TOLUENE 2,4-<br>DIISOCYANATE                          | 584-84-9        | ACGIH                   | TWA:0.005 ppm;STEL:0.02 ppm  | A4: Not class. as human carcin, Sensitizer    |
| TOLUENE 2,4-<br>DIISOCYANATE                          | 584-84-9        | OSHA                    | CEIL:0.14 mg/m3(0.02 ppm)  |   |
| DIMETHYL SILOXANE,<br>REACTION PRODUCT WITH<br>SILICA | 67762-90-7      | CMRG                    | CEIL:5 mg/m3   |   |
| SILICA, AMORPHOUS                                     | 67762-90-7      | OSHA                    | TWA concentration: 0.8 mg/m3; TWA: 20 millions of particles/cu. ft.  |   |
| TIN, ORGANIC COMPOUNDS                                | 77-58-7         | ACGIH                   | TWA(as Sn):0.1<br>mg/m3;STEL(as Sn):0.2<br>mg/m3   | A4: Not class. as human carcin, Skin Notation |
| TIN, ORGANIC COMPOUNDS                                | 77-58-7         | OSHA                    | TWA(as Sn):0.1 mg/m3   |   |
| FREE ISOCYANATES                                      | 91-08-7         | Manufacturer determined | TWA:0.005 ppm;STEL:0.02 ppm  |   |
| TOLUENE 2,6- DIISOCYANATE                             | 91-08-7         | ACGIH                   | TWA:0.005 ppm;STEL:0.02 ppm  | A4: Not class. as human carcin, 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 fume/vapors. 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. Gloves made from the following material(s) are recommended:

Neoprene

Nitrile Rubber

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 – Nitrile

#### 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

General Physical Form: Liquid

Odor, Color, Grade: Black caulk with mild odor.

Odor threshold
PH
Not Applicable
Melting point
Not Applicable
Not Applicable
Soiling Point
Not Applicable
>= 284 °F

Flash Point 114 °F [Test Method: Tagliabue Closed Cup]

Evaporation rate 0.21 [Ref Std: BUOAC=1]

Solubility in Water Nil

Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableDecomposition temperatureNo Data AvailableViscosity25,000 centipoise

Hazardous Air Pollutants 0.11 lb HAPS/lb solids [Test Method: Calculated]

Volatile Organic Compounds 18.6 % weight [Test Method: calculated per CARB title 2]

Percent volatile 18.6 %

VOC Less H2O & Exempt Solvents 181 g/l [Test Method: 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

Not determined

#### 10.5. Incompatible materials

Amines

#### 10.6. Hazardous decomposition products

Substance None known. Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

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

#### 11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

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 target organ effects after inhalation.

#### **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 target organ effects after ingestion.

#### 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               | C.A.S. No. | Class Description             | Regulation                                  |
|--------------------------|------------|-------------------------------|---|
| 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                                     | Dermal                                |         | No data available; calculated ATE > 5,000 mg/kg |
| Overall product                                     | Inhalation-<br>Vapor(4 hr)            |         | No data available; calculated ATE 10 - 20 mg/l  |
| Overall product                                     | Ingestion                             |         | No data available; calculated ATE > 5,000 mg/kg |
| TALC  | Dermal                                |         | LD50 Not available                              |
| TALC  | Ingestion                             |         | LD50 Not available                              |
| 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-<br>Vapor (4<br>hours)     | Rat     | LC50 > 28.8 mg/l                                |
| 1-METHOXY-2-PROPYL ACETATE                          | Ingestion                             | Rat     | LD50 8,532 mg/kg                                |
| URETHANE PREPOLYMER                                 | Dermal                                |         | LD50 estimated to be > 5,000 mg/kg              |
| URETHANE PREPOLYMER                                 | 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 | Derma!                                | Rabbit  | LD50 > 5,000 mg/kg                              |
| DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA     | Inhalation-<br>Dust/Mist<br>(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-<br>Dust/Mist<br>(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                              |
| DIBUTYLTIN DILAURATE                                | Dermal                                | Rat     | LD50 > 2,000 mg/kg                              |
| DIBUTYLTIN DILAURATE                                | Ingestion                             | Rat     | LD50 1,290 mg/kg                                |
| TOLUENE 2,4-DIISOCYANATE                            | Inhalation-<br>Vapor (4<br>hours)     | Mouse   | LC50 0.12 mg/l                                  |

| TOLUENE 2,6-DIISOCYANATE | Inhalation- | Mouse  | LC50 0.12 mg/l     |  |
|--------------------------|-------------|--------|--------------------|--|
|                          | Vapor (4    |        | _                  |  |
|                          | hours)      |        |                    |  |
| 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- | Rat    | LC50 0.35 mg/l     |  |
|                          | Dust/Mist   |        |                    |  |
|                          | (4 hours)   |        |                    |  |
| TOLUENE 2,4-DIISOCYANATE | Ingestion   | Rat    | LD50 > 5,000 mg/kg |  |
| TOLUENE 2,6-DIISOCYANATE | Inhalation- | Rat    | LC50 0.35 mg/l     |  |
|                          | Dust/Mist   |        |                    |  |
|                          | (4 hours)   |        |                    |  |
| 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   |         | No significant irritation |  |
| 1-METHOXY-2-PROPYL ACETATE                          | Rabbit  | No significant irritation |  |
| URETHANE PREPOLYMER                                 |         | 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 |  |
| 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             |  |
| URETHANE PREPOLYMER                                 |         | 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 |  |
| DIBUTYLTIN DILAURATE                                | Rabbit  | Corrosive                 |  |
| TOLUENE 2,4-DIISOCYANATE                            | Rabbit  | Corrosive                 |  |
| TOLUENE 2,6-DIISOCYANATE                            | Rabbit  | Согтоѕіче                 |  |

# Skin Sensitization

| Name  | Species                | Value  |
|---|------------------------|--|
| 1-METHOXY-2-PROPYL ACETATE                          | Guinea<br>pig          | Not sensitizing  |
| URETHANE PREPOLYMER                                 |                        | Some positive data exist, but the data are not sufficient for classification |
| DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA     | Human<br>and<br>animal | Not sensitizing  |
| Synthetic amorphous silica, fumed, crystalline free | Human<br>and<br>animal | Not sensitizing  |
| DIBUTYLTIN DILAURATE                                | Guinea<br>pig          | Sensitizing  |
| TOLUENE 2,4-DIISOCYANATE                            | Human<br>and<br>animal | Sensitizing  |
| TOLUENE 2,6-DIISOCYANATE                            | Human<br>and<br>animal | Sensitizing  |

**Respiratory Sensitization** 

| Name                     | Species | Value           |
|--------------------------|---------|-----------------|
| TALC                     | Human   | Not sensitizing |
| 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 |
| DIBUTYLTIN DILAURATE                                | In vivo  | Some positive data exist, but the data are not sufficient for classification |
| 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<br>Specified | Rat                           | Some positive data exist, but the data are not sufficient for classification |
| DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA     | Not<br>Specified | Mouse                         | Some positive data exist, but the data are not sufficient for classification |
| Synthetic amorphous silica, fumed, crystalline free | Not<br>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 2,4-DIISOCYANATE                            | Inhalation       | Human<br>and<br>animal        | Not carcinogenic   |
| TOLUENE 2,4-DIISOCYANATE                            | Ingestion        | Multiple<br>animal<br>species | Carcinogenic   |
| TOLUENE 2,6-DIISOCYANATE                            | Inhalation       | Human<br>and<br>animal        | Not carcinogenic   |
| TOLUENE 2,6-DIISOCYANATE                            | Ingestion        | Multiple<br>animal<br>species | Carcinogenic   |

Reproductive Toxicity
Reproductive and/or Developmental Effects

| Name                        | Route      | Value                            | Species | Test Result                 | Exposure<br>Duration               |
|-----------------------------|------------|----------------------------------|---------|-----------------------------|------------------------------------|
| TALC                        | Ingestion  | Not toxic to development         | Rat     | NOAEL<br>1,600 mg/kg        | during<br>organogenesi<br>s        |
| 1-METHOXY-2-PROPYL ACETATE  | Ingestion  | Not toxic to female reproduction | Rat     | NOAEL<br>1,000<br>mg/kg/day | premating &<br>during<br>gestation |
| 1-METHOXY-2-PROPYL ACETATE  | Ingestion  | Not toxic to male reproduction   | Rat     | NOAEL<br>1,000<br>mg/kg/day | premating & during gestation       |
| 1-METHOXY-2-PROPYL ACETATE  | Ingestion  | Not toxic to development         | Rat     | NOAEL<br>1,000<br>mg/kg/day | premating & during gestation       |
| 1-METHOXY-2-PROPYL ACETATE  | Inhalation | Not toxic to development         | Rat     | NOAEL 21.6<br>mg/l          | during<br>organogenesi<br>s        |
| DIMETHYL SILOXANE, REACTION | Ingestion  | Not toxic to female reproduction | Rat     | NOAEL 509                   | 1 generation                       |

| PRODUCT WITH SILICA                                 |            |  |     | mg/kg/day                   |                             |
|---|------------|--|-----|-----------------------------|-----------------------------|
| DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA     | Ingestion  | Not toxic to male reproduction   | Rat | NOAEL 497<br>mg/kg/day      | 1 generation                |
| DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA     | Ingestion  | Not toxic to development   | Rat | NOAEL<br>1,350<br>mg/kg/day | during<br>organogenesi<br>s |
| Synthetic amorphous silica, fumed, crystalline free | Ingestion  | Not toxic to female reproduction   | Rat | NOAEL 509<br>mg/kg/day      | 1 generation                |
| Synthetic amorphous silica, fumed, crystalline free | Ingestion  | Not toxic to male reproduction   | Rat | NOAEL 497<br>mg/kg/day      | 1 generation                |
| Synthetic amorphous silica, fumed, crystalline free | Ingestion  | Not toxic to development   | Rat | NOAEL<br>1,350<br>mg/kg/day | during<br>organogenesi<br>s |
| DIBUTYLTIN DILAURATE                                | Ingestion  | Toxic to female reproduction   | Rat | NOAEL 2<br>mg/kg/day        | premating into lactation    |
| DIBUTYLTIN DILAURATE                                | Ingestion  | Toxic to development   | Rat | NOAEL 2.5<br>mg/kg/day      | during                      |
| TOLUENE 2,4-DIISOCYANATE                            | Inhalation | Not toxic to female reproduction   | Rat | NOAEL .002<br>mg/l          | 2 generation                |
| TOLUENE 2,4-DIISOCYANATE                            | Inhalation | Not toxic to male reproduction   | Rat | NOAEL .002                  | 2 generation                |
| TOLUENE 2,4-DIISOCYANATE                            | Inhalation | Some positive developmental data exist,<br>but the data are not sufficient for<br>classification | Rat | NOAEL .004<br>mg/l          | during<br>organogenesi<br>s |
| TOLUENE 2,6-DIISOCYANATE                            | Inhalation | Not toxic to female reproduction   | Rat | NOAEL .002<br>mg/l          | 2 generation                |
| TOLUENE 2,6-DIISOCYANATE                            | Inhalation | Not toxic to male reproduction   | Rat | NOAEL .002<br>mg/l          | 2 generation                |
| TOLUENE 2,6-DIISOCYANATE                            | Inhalation | Some positive developmental data exist,<br>but the data are not sufficient for<br>classification | Rat | NOAEL .004<br>mg/l          | during<br>organogenesi<br>s |

Target Organ(s) Specific Target Organ Toxicity - single exposure

| Name                          | Route      | Target Organ(s)        | Value  | Species | Test Result            | Exposure<br>Duration  |
|-------------------------------|------------|------------------------|--|---------|------------------------|-----------------------|
| 1-METHOXY-2-PROPYL<br>ACETATE | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification |         | NOAEL Not<br>available |                       |
| TOLUENE 2,4-<br>DIISOCYANATE  | Inhalation | respiratory irritation | May cause respiratory irritation   | Human   | NOAEL Not<br>available | occupational exposure |
| TOLUENE 2,6-<br>DIISOCYANATE  | Inhalation | respiratory irritation | May cause respiratory irritation   | Human   | NOAEL Not<br>available | occupational exposure |

Specific Target Organ Toxicity - repeated exposure

| Name                          | Route      | Target Organ(s)                            | Value  | Species                       | Test Result                 | Exposure<br>Duration     |
|-------------------------------|------------|--|--|-------------------------------|-----------------------------|--------------------------|
| TALC                          | Inhalation | pneumoconiosis                             | Causes damage to organs<br>through prolonged or repeated<br>exposure         | Human                         | NOAEL Not<br>available      | occupational<br>exposure |
| TALC                          | Inhalation | pulmonary fibrosis  <br>respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL 18<br>mg/m3           | 113 weeks                |
| 1-METHOXY-2-PROPYL<br>ACETATE | Inhalation | kidney and/or<br>bladder                   | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL 16.2<br>mg/l          | 9 days                   |
| 1-METHOXY-2-PROPYL<br>ACETATE | Inhalation | olfactory system                           | Some positive data exist, but the data are not sufficient for classification | Mouse                         | LOAEL 1.62<br>mg/l          | 9 days                   |
| 1-METHOXY-2-PROPYL<br>ACETATE | Inhalation | blood                                      | All data are negative  | Multiple<br>animal<br>species | NOAEL 16.2<br>mg/l          | 9 days                   |
| 1-METHOXY-2-PROPYL<br>ACETATE | Ingestion  | endocrine system                           | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL<br>1,000<br>mg/kg/day | 44 days                  |
| DIMETHYL SILOXANE,            | Inhalation | respiratory system                         | All data are negative  | Human                         | NOAEL Not                   | occupational             |

| REACTION PRODUCT<br>WITH SILICA                           |            | silicosis                         |  |       | available              | exposure                 |
|---|------------|-----------------------------------|--|-------|------------------------|--------------------------|
| Synthetic amorphous<br>silica, fumed, crystalline<br>free | Inhalation | respiratory system  <br>silicosis | All data are negative  | Human | NOAEL Not<br>available | occupational exposure    |
| CARBON BLACK  | Inhalation | pneumoconiosis                    | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not<br>available | occupational exposure    |
| DIBUTYLTIN<br>DILAURATE                                   | Ingestion  | liver                             | Causes damage to organs<br>through prolonged or repeated<br>exposure         | Rat   | NOAEL 2<br>mg/kg/day   | 2 weeks                  |
| DIBUTYLTIN<br>DILAURATE                                   | Ingestion  | immune system                     | Causes damage to organs<br>through prolonged or repeated<br>exposure         | Rat   | NOAEL 0.3<br>mg/kg/day | 28 days                  |
| TOLUENE 2,4-<br>DIISOCYANATE                              | Inhalation | respiratory system                | Causes damage to organs<br>through prolonged or repeated<br>exposure         | Human | NOAEL<br>.000006 mg/l  | occupational<br>exposure |
| TOLUENE 2,6-<br>DIISOCYANATE                              | Inhalation | respiratory system                | Causes damage to organs<br>through prolonged or repeated<br>exposure         | Human | NOAEL<br>.000006 mg/l  | occupational<br>exposure |

#### **Aspiration Hazard**

| Name : |        |
|--------|--------|
| Name   | Value  |
|        | 7 ALUC |
|        |        |

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. Dispose of waste product in a permitted industrial waste 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.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

# **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.

#### 311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

#### Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

| Ingredient                      | C.A.S. No | % by Wt |
|---------------------------------|-----------|---------|
| <b>TOLUENE 2,4-DIISOCYANATE</b> | 584-84-9  | < 0.1   |
| TOLUENE 2,6-DIISOCYANATE        | 91-08-7   | < 0.1   |

# 15.2. State Regulations

Contact 3M for more information.

#### California Proposition 65

| Ingredient                       | C.A.S. No. | Classification |
|----------------------------------|------------|----------------|
| Benzene, 1,3-diisocyanatomethyl- | None       | Carcinogen     |
| CARBON BLACK                     | 1333-86-4  | Carcinogen     |

WARNING: This product contains a chemical known to the State of California to cause cancer.

#### 15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

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: 1 Special Hazards: Reacts with Water

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.

#### **HMIS Hazard Classification**

Health: 2 Flammability: 2 Physical Hazard: 1 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

 Document Group:
 09-2062-9
 Version Number:
 7.00

 Issue Date:
 08/21/14
 Supercedes Date:
 10/10/06

Page 13 of 14

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. 3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M

3M USA SDSs are available at www.3M.com