



## Safety Data Sheet

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|                        |           |                         |          |
|------------------------|-----------|-------------------------|----------|
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### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Neoprene High Performance Contact Adhesive 1357

#### Product Identification Numbers

62-1357-2630-5, 62-1357-2631-3, 62-1357-5530-4, 62-1357-5535-3, 62-1357-6530-3, 62-1357-7530-2, 62-1357-8540-0, 62-1357-9530-0, 62-1357-9531-8

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

##### Recommended use

Adhesive, Industrial use

#### 1.3. Supplier's details

|                      |   |
|----------------------|---|
| <b>MANUFACTURER:</b> | 3M                                      |
| <b>DIVISION:</b>     | Industrial Adhesives and Tapes Division |
| <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

#### 2.1. Hazard classification

Flammable Liquid: Category 2.  
Serious Eye Damage/Irritation: Category 2A.  
Skin Corrosion/Irritation: Category 2.  
Skin Sensitizer: Category 1.  
Reproductive Toxicity: Category 1B.  
Specific Target Organ Toxicity (central nervous system): Category 3.  
Specific Target Organ Toxicity (repeated exposure): Category 1.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Flame | Exclamation mark | Health Hazard |

### Pictograms



### Hazard Statements

Highly flammable liquid and vapor.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

May cause drowsiness or dizziness.

May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure:

nervous system |

sensory organs |

### 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.

Use only outdoors or in a well-ventilated area.

Wear protective gloves and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

#### Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

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

#### Storage:

Keep cool.

Keep container tightly closed.

Store locked up in a well-ventilated place.

**Disposal:**

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

**2.3. Hazards not otherwise classified**

None.

21% of the mixture consists of ingredients of unknown acute inhalation toxicity.

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

| Ingredient           | C.A.S. No. | % by Wt                |
|----------------------|------------|------------------------|
| Magnesium Resinate   | 68037-42-3 | 5 - 10 Trade Secret *  |
| Petroleum Distillate | 64741-84-0 | 20 - 50 Trade Secret * |
| n-Hexane             | 110-54-3   | 5 - 20 Trade Secret *  |
| Acetone              | 67-64-1    | 10 - 30 Trade Secret * |
| Polychloroprene      | 9010-98-4  | 7 - 13 Trade Secret *  |
| Methyl Ethyl Ketone  | 78-93-3    | 7 - 13 Trade Secret *  |
| Toluene              | 108-88-3   | 1 - 10 Trade Secret *  |
| Rosin                | 8050-09-7  | 0.1 - 1 Trade Secret * |
| Zinc Oxide           | 1314-13-2  | 0.1 - 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:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

**If Swallowed:**

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

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

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

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

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

#### Hazardous Decomposition or By-Products

| <u>Substance</u> | <u>Condition</u>  |
|------------------|-------------------|
| Aldehydes        | During Combustion |
| Hydrocarbons     | During Combustion |
| Carbon monoxide  | During Combustion |
| Carbon dioxide   | 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.

## 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. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue 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. Seal the container. 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 dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

#### 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidizing agents.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

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

| Ingredient          | C.A.S. No. | Agency | Limit type  | Additional Comments  |
|---------------------|------------|--------|---|--|
| Toluene             | 108-88-3   | OSHA   | TWA:200 ppm;CEIL:300 ppm  |  |
| Toluene             | 108-88-3   | ACGIH  | TWA:20 ppm  | A4: Not class. as human carcin                                   |
| Toluene             | 108-88-3   | CMRG   | STEL:75 ppm   | Skin Notation  |
| n-Hexane            | 110-54-3   | ACGIH  | TWA:50 ppm  | Skin Notation  |
| n-Hexane            | 110-54-3   | OSHA   | TWA:1800 mg/m3(500 ppm)   |  |
| Zinc Oxide          | 1314-13-2  | ACGIH  | TWA(respirable fraction):2 mg/m3;STEL(respirable fraction):10 mg/m3               |  |
| Zinc Oxide          | 1314-13-2  | OSHA   | TWA(as fume):5 mg/m3;TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3 |  |
| Acetone             | 67-64-1    | OSHA   | TWA:2400 mg/m3(1000 ppm)  |  |
| Acetone             | 67-64-1    | ACGIH  | TWA:500 ppm;STEL:750 ppm  | A4: Not class. as human carcin                                   |
| Methyl Ethyl Ketone | 78-93-3    | ACGIH  | TWA:200 ppm;STEL:300 ppm  |  |
| Methyl Ethyl Ketone | 78-93-3    | OSHA   | TWA:590 mg/m3(200 ppm)  |  |
| Rosin               | 8050-09-7  | ACGIH  | Limit value not established:  | Cntrl all exposr-low as possib,<br>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: Polymer laminate

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

### Respiratory protection

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

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

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>General Physical Form:</b>                  | Liquid  |
| <b>Odor, Color, Grade:</b>                     | Grey/green, strong petroleum 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>                           | >=56 °C [ <i>Details: Acetone</i> ]                                   |
| <b>Flash Point</b>                             | -7 °F [ <i>Test Method: Closed Cup</i> ] [ <i>Details: n-Hexane</i> ] |
| <b>Evaporation rate</b>                        | >=2.0 [ <i>Ref Std: WATER=1</i> ]                                     |
| <b>Flammability (solid, gas)</b>               | Not Applicable  |
| <b>Flammable Limits(LEL)</b>                   | 1.0 % volume  |
| <b>Flammable Limits(UEL)</b>                   | 12.8 % volume   |
| <b>Vapor Pressure</b>                          | <=185 mmHg [ <i>@ 68 °F</i> ]   |
| <b>Vapor Density</b>                           | 2.0 [ <i>Ref Std: AIR=1</i> ]   |
| <b>Density</b>                                 | 0.815 g/ml  |
| <b>Specific Gravity</b>                        | 0.815 [ <i>Ref Std: WATER=1</i> ]                                     |
| <b>Solubility in Water</b>                     | Slight (less than 10%)  |
| <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>                               | 200 - 450 centipoise [ <i>@ 27 °C</i> ]                               |
| <b>Hazardous Air Pollutants</b>                | <=13.2 % weight [ <i>Test Method: Calculated</i> ]                    |
| <b>VOC Less H2O &amp; Exempt Solvents</b>      | <=580 g/l [ <i>Test Method: calculated SCAQMD rule 443.1</i> ]        |
| <b>Solids Content</b>                          | 12 - 25 %   |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Heat  
Sparks and/or flames

### 10.5. Incompatible materials

Strong oxidizing agents

### 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.

May cause additional health effects (see below).

#### Skin Contact:

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

#### Eye Contact:

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

#### Ingestion:

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

May cause additional health effects (see below).

#### Additional Health Effects:

#### Single exposure may cause target organ effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

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

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Peripheral Neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy.

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

**Reproductive/Developmental Toxicity:**

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

| Name                 | Route                          | Species | Value   |
|----------------------|--------------------------------|---------|---|
| Overall product      | Inhalation-Vapor(4 hr)         |         | No data available; calculated ATE > 50 mg/l     |
| Overall product      | Ingestion                      |         | No data available; calculated ATE > 5,000 mg/kg |
| Petroleum Distillate | Dermal                         | Rabbit  | LD50 > 2,000 mg/kg                              |
| Petroleum Distillate | Inhalation-Vapor (4 hours)     | Rat     | LC50 259 mg/l                                   |
| Petroleum Distillate | Ingestion                      | Rat     | LD50 > 5,000 mg/kg                              |
| n-Hexane             | Dermal                         | Rabbit  | LD50 > 2,000 mg/kg                              |
| n-Hexane             | Inhalation-Vapor (4 hours)     | Rat     | LC50 170 mg/l                                   |
| n-Hexane             | Ingestion                      | Rat     | LD50 > 28,700 mg/kg                             |
| Acetone              | Dermal                         | Rabbit  | LD50 > 15,688 mg/kg                             |
| Acetone              | Inhalation-Vapor (4 hours)     | Rat     | LC50 76 mg/l                                    |
| Acetone              | Ingestion                      | Rat     | LD50 5,800 mg/kg                                |
| Methyl Ethyl Ketone  | Dermal                         | Rabbit  | LD50 > 8,050 mg/kg                              |
| Methyl Ethyl Ketone  | Inhalation-Vapor (4 hours)     | Rat     | LC50 34.5 mg/l                                  |
| Methyl Ethyl Ketone  | Ingestion                      | Rat     | LD50 2,737 mg/kg                                |
| Polychloroprene      | Dermal                         |         | LD50 estimated to be > 5,000 mg/kg              |
| Polychloroprene      | Ingestion                      | Rat     | LD50 > 20,000 mg/kg                             |
| Magnesium Resinate   | Ingestion                      |         | LD50 estimated to be 2,000 - 5,000 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                                |
| Zinc Oxide           | Dermal                         |         | LD50 estimated to be > 5,000 mg/kg              |
| Zinc Oxide           | Inhalation-Dust/Mist (4 hours) | Rat     | LC50 > 5.7 mg/l                                 |
| Zinc Oxide           | Ingestion                      | Rat     | LD50 > 5,000 mg/kg                              |
| Rosin                | Dermal                         | Rabbit  | LD50 > 2,500 mg/kg                              |
| Rosin                | Ingestion                      | Rat     | LD50 7,600 mg/kg                                |

ATE = acute toxicity estimate



**Skin Corrosion/Irritation**

| Name                 | Species          | Value                     |
|----------------------|------------------|---------------------------|
| Petroleum Distillate | Rabbit           | Irritant                  |
| n-Hexane             | Human and animal | Mild irritant             |
| Acetone              | Mouse            | Minimal irritation        |
| Methyl Ethyl Ketone  | Rabbit           | Minimal irritation        |
| Polychloroprene      | Human            | No significant irritation |
| Toluene              | Rabbit           | Irritant                  |
| Zinc Oxide           | Human and animal | No significant irritation |
| Rosin                | Rabbit           | No significant irritation |

**Serious Eye Damage/Irritation**

| Name                 | Species                | Value                     |
|----------------------|------------------------|---------------------------|
| Petroleum Distillate | Rabbit                 | Mild irritant             |
| n-Hexane             | Rabbit                 | Mild irritant             |
| Acetone              | Rabbit                 | Severe irritant           |
| Methyl Ethyl Ketone  | Rabbit                 | Severe irritant           |
| Polychloroprene      | Professional judgement | No significant irritation |
| Toluene              | Rabbit                 | Moderate irritant         |
| Zinc Oxide           | Rabbit                 | Mild irritant             |
| Rosin                | Rabbit                 | Mild irritant             |

**Skin Sensitization**

| Name                 | Species    | Value  |
|----------------------|------------|--|
| Petroleum Distillate | Guinea pig | Not sensitizing  |
| n-Hexane             | Human      | Not sensitizing  |
| Toluene              | Guinea pig | Not sensitizing  |
| Zinc Oxide           | Guinea pig | Some positive data exist, but the data are not sufficient for classification |
| Rosin                | Guinea pig | Sensitizing  |

**Respiratory Sensitization**

| Name  | Species | Value  |
|-------|---------|--|
| Rosin | Human   | Some positive data exist, but the data are not sufficient for classification |

**Germ Cell Mutagenicity**

| Name                 | Route    | Value  |
|----------------------|----------|--|
| Petroleum Distillate | In Vitro | Not mutagenic  |
| n-Hexane             | In Vitro | Not mutagenic  |
| n-Hexane             | In vivo  | Not mutagenic  |
| Acetone              | In vivo  | Not mutagenic  |
| Acetone              | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Methyl Ethyl Ketone  | In Vitro | Not mutagenic  |
| Toluene              | In Vitro | Not mutagenic  |
| Toluene              | In vivo  | Not mutagenic  |
| Zinc Oxide           | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Zinc Oxide           | In vivo  | Some positive data exist, but the data are not                               |

sufficient for classification

**Carcinogenicity**

| Name                | Route         | Species                 | Value  |
|---------------------|---------------|-------------------------|--|
| n-Hexane            | Dermal        | Mouse                   | Not carcinogenic   |
| n-Hexane            | Inhalation    | Mouse                   | Some positive data exist, but the data are not sufficient for classification |
| Acetone             | Not Specified | Multiple animal species | Not carcinogenic   |
| Methyl Ethyl Ketone | Inhalation    | Human                   | Not carcinogenic   |
| Toluene             | Dermal        | Mouse                   | Some positive data exist, but the data are not sufficient for classification |
| Toluene             | Ingestion     | Rat                     | Some positive data exist, but the data are not sufficient for classification |
| Toluene             | Inhalation    | Mouse                   | Some positive data exist, but the data are not sufficient for classification |

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

| Name                | Route      | Value   | Species                 | Test Result            | Exposure Duration            |
|---------------------|------------|---|-------------------------|------------------------|------------------------------|
| n-Hexane            | Ingestion  | Not toxic to development  | Mouse                   | NOAEL 2,200 mg/kg/day  | during organogenesis         |
| n-Hexane            | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification              | Rat                     | NOAEL 0.7 mg/l         | during gestation             |
| n-Hexane            | Ingestion  | Toxic to male reproduction  | Rat                     | NOAEL 1,140 mg/kg/day  | 90 days                      |
| n-Hexane            | Inhalation | Toxic to male reproduction  | Rat                     | LOAEL 3.52 mg/l        | 28 days                      |
| Acetone             | Ingestion  | Not toxic to female reproduction  | Mouse                   | NOAEL 11,298 mg/kg/day | 13 weeks                     |
| Acetone             | Ingestion  | Some positive male reproductive data exist, but the data are not sufficient for classification          | Rat                     | NOAEL 1,700 mg/kg/day  | 13 weeks                     |
| Acetone             | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification              | Rat                     | NOAEL 5.2 mg/l         | during organogenesis         |
| Methyl Ethyl Ketone | Inhalation | Not toxic to female reproduction  | Rat                     | NOAEL 14.7 mg/l        | 90 days                      |
| Methyl Ethyl Ketone | Inhalation | Not toxic to male reproduction  | Rat                     | NOAEL 14.7 mg/l        | 90 days                      |
| Methyl Ethyl Ketone | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification              | Rat                     | LOAEL 8.8 mg/l         | during gestation             |
| Toluene             | Inhalation | Some positive female reproductive data exist, but the data are not sufficient for classification        | Human                   | NOAEL Not available    | occupational exposure        |
| Toluene             | Inhalation | Some positive male reproductive data exist, but the data are not sufficient for classification          | 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       |
| Zinc Oxide          | Ingestion  | Some positive reproductive/developmental data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL 125 mg/kg/day    | premating & during gestation |

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

| Name                 | Route      | Target Organ(s)                   | Value  | Species                 | Test Result         | Exposure Duration      |
|----------------------|------------|-----------------------------------|--|-------------------------|---------------------|------------------------|
| Petroleum Distillate | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human and animal        | NOAEL Not available |                        |
| Petroleum Distillate | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification |                         | NOAEL Not available |                        |
| n-Hexane             | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human                   | NOAEL Not available | not available          |
| n-Hexane             | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Rabbit                  | NOAEL Not available | 8 hours                |
| n-Hexane             | Inhalation | respiratory system                | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 24.6 mg/l     | 8 hours                |
| Acetone              | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human                   | NOAEL Not available |                        |
| Acetone              | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Human                   | NOAEL Not available |                        |
| Acetone              | Inhalation | immune system                     | Some positive data exist, but the data are not sufficient for classification | Human                   | NOAEL 1.19 mg/l     | 6 hours                |
| Acetone              | Inhalation | liver                             | Some positive data exist, but the data are not sufficient for classification | Guinea pig              | NOAEL Not available |                        |
| Acetone              | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Human                   | NOAEL Not available | poisoning and/or abuse |
| Methyl Ethyl Ketone  | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | official classification | NOAEL Not available |                        |
| Methyl Ethyl Ketone  | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Human                   | NOAEL Not available |                        |
| Methyl Ethyl Ketone  | Ingestion  | liver                             | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL Not available | not applicable         |
| Methyl Ethyl Ketone  | Ingestion  | kidney and/or bladder             | Some positive data exist, but the data are not sufficient for classification | Rat                     | LOAEL 1,080 mg/kg   | not applicable         |
| 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                     | Some positive data exist, but the data are not sufficient for classification | Mouse                   | NOAEL 0.004 mg/l    | 3 hours                |
| Toluene              | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Human                   | NOAEL Not available | poisoning and/or abuse |

**Specific Target Organ Toxicity - repeated exposure**

| Name     | Route      | Target Organ(s)           | Value  | Species | Test Result         | Exposure Duration     |
|----------|------------|---------------------------|--|---------|---------------------|-----------------------|
| n-Hexane | Inhalation | peripheral nervous system | Causes damage to organs through prolonged or repeated exposure               | Human   | NOAEL Not available | occupational exposure |
| n-Hexane | Inhalation | respiratory system        | Some positive data exist, but the data are not sufficient for classification | Mouse   | LOAEL 1.76 mg/l     | 13 weeks              |
| n-Hexane | Inhalation | liver                     | Some positive data exist, but the data are not sufficient for classification | Rat     | NOAEL Not available | 6 months              |
| n-Hexane | Inhalation | kidney and/or             | Some positive data exist, but the  | Rat     | LOAEL 1.76          | 6 months              |

|                     |            |   |  |            |                        |                       |
|---------------------|------------|---|--|------------|------------------------|-----------------------|
|                     |            | bladder   | data are not sufficient for classification                                   |            | mg/l                   |                       |
| n-Hexane            | Inhalation | hematopoietic system  | Some positive data exist, but the data are not sufficient for classification | Mouse      | NOAEL 35.2 mg/l        | 13 weeks              |
| n-Hexane            | Inhalation | auditory system   immune system   eyes  | Some positive data exist, but the data are not sufficient for classification | Human      | NOAEL Not available    | occupational exposure |
| n-Hexane            | Inhalation | heart   skin   endocrine system   | All data are negative  | Rat        | NOAEL 1.76 mg/l        | 6 months              |
| n-Hexane            | Ingestion  | peripheral nervous system   | Some positive data exist, but the data are not sufficient for classification | Rat        | NOAEL 1,140 mg/kg/day  | 90 days               |
| n-Hexane            | Ingestion  | endocrine system   hematopoietic system   liver   immune system   kidney and/or bladder                     | Some positive data exist, but the data are not sufficient for classification | Rat        | NOAEL Not available    | 13 weeks              |
| Acetone             | Dermal     | eyes  | Some positive data exist, but the data are not sufficient for classification | Guinea pig | NOAEL Not available    | 3 weeks               |
| Acetone             | Inhalation | hematopoietic system  | Some positive data exist, but the data are not sufficient for classification | Human      | NOAEL 3 mg/l           | 6 weeks               |
| Acetone             | Inhalation | immune system   | Some positive data exist, but the data are not sufficient for classification | Human      | NOAEL 1.19 mg/l        | 6 days                |
| Acetone             | Inhalation | kidney and/or bladder   | Some positive data exist, but the data are not sufficient for classification | Guinea pig | NOAEL 119 mg/l         | not available         |
| Acetone             | Inhalation | heart   liver   | All data are negative  | Rat        | NOAEL 45 mg/l          | 8 weeks               |
| Acetone             | Ingestion  | kidney and/or bladder   | Some positive data exist, but the data are not sufficient for classification | Rat        | NOAEL 900 mg/kg/day    | 13 weeks              |
| Acetone             | Ingestion  | heart   | Some positive data exist, but the data are not sufficient for classification | Rat        | NOAEL 2,500 mg/kg/day  | 13 weeks              |
| Acetone             | Ingestion  | hematopoietic system  | Some positive data exist, but the data are not sufficient for classification | Rat        | NOAEL 200 mg/kg/day    | 13 weeks              |
| Acetone             | Ingestion  | liver   | Some positive data exist, but the data are not sufficient for classification | Mouse      | NOAEL 3,896 mg/kg/day  | 14 days               |
| Acetone             | Ingestion  | eyes  | All data are negative  | Rat        | NOAEL 3,400 mg/kg/day  | 13 weeks              |
| Acetone             | Ingestion  | respiratory system  | All data are negative  | Rat        | NOAEL 2,500 mg/kg/day  | 13 weeks              |
| Acetone             | Ingestion  | muscles   | All data are negative  | Rat        | NOAEL 2,500 mg/kg      | 13 weeks              |
| Acetone             | Ingestion  | skin   bone, teeth, nails, and/or hair  | All data are negative  | Mouse      | NOAEL 11,298 mg/kg/day | 13 weeks              |
| Methyl Ethyl Ketone | Dermal     | nervous system  | All data are negative  | Guinea pig | NOAEL Not available    | 31 weeks              |
| Methyl Ethyl Ketone | Inhalation | liver   kidney and/or bladder   | Some positive data exist, but the data are not sufficient for classification | Rat        | NOAEL 14.7 mg/l        | 90 days               |
| Methyl Ethyl Ketone | Inhalation | heart   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   immune system   muscles | All data are negative  | Rat        | NOAEL 14.7 mg/l        | 90 days               |
| Methyl Ethyl Ketone | Ingestion  | liver   | Some positive data exist, but the  | Rat        | NOAEL Not              | 7 days                |

|                     |            |   |  |                         |                       |                        |
|---------------------|------------|---|--|-------------------------|-----------------------|------------------------|
|                     |            |   | data are not sufficient for classification                                   |                         | available             |                        |
| Methyl Ethyl Ketone | Ingestion  | nervous system  | All data are negative  | Rat                     | NOAEL 173 mg/kg/day   | 90 days                |
| Toluene             | Inhalation | auditory system   nervous system   eyes   olfactory system      | Causes damage to organs through prolonged or repeated exposure               | Human                   | NOAEL Not available   | poisoning and/or abuse |
| Toluene             | Inhalation | respiratory system  | Some positive data exist, but the data are not sufficient for classification | Rat                     | LOAEL 2.3 mg/l        | 15 months              |
| Toluene             | Inhalation | heart   liver   kidney and/or bladder                           | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 11.3 mg/l       | 15 weeks               |
| Toluene             | Inhalation | endocrine system  | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 1.1 mg/l        | 4 weeks                |
| Toluene             | Inhalation | immune system   | Some positive data exist, but the data are not sufficient for classification | Mouse                   | NOAEL Not available   | 20 days                |
| Toluene             | Inhalation | bone, teeth, nails, and/or hair                                 | Some positive data exist, but the data are not sufficient for classification | Mouse                   | NOAEL 1.1 mg/l        | 8 weeks                |
| Toluene             | Inhalation | hematopoietic system   vascular system                          | Some positive data exist, but the data are not sufficient for classification | Human                   | NOAEL Not available   | occupational exposure  |
| Toluene             | Ingestion  | nervous system  | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 625 mg/kg/day   | 13 weeks               |
| Toluene             | Ingestion  | heart   | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 2,500 mg/kg/day | 13 weeks               |
| Toluene             | Ingestion  | liver   kidney and/or bladder                                   | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL 2,500 mg/kg/day | 13 weeks               |
| Toluene             | Ingestion  | hematopoietic system  | Some positive data exist, but the data are not sufficient for classification | Mouse                   | NOAEL 600 mg/kg/day   | 14 days                |
| Toluene             | Ingestion  | endocrine system  | Some positive data exist, but the data are not sufficient for classification | Mouse                   | NOAEL 105 mg/kg/day   | 28 days                |
| Toluene             | Ingestion  | immune system   | Some positive data exist, but the data are not sufficient for classification | Mouse                   | NOAEL 105 mg/kg/day   | 4 weeks                |
| Zinc Oxide          | Ingestion  | nervous system  | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 600 mg/kg/day   | 10 days                |
| Zinc Oxide          | Ingestion  | endocrine system   hematopoietic system   kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Other                   | NOAEL 500 mg/kg/day   | 6 months               |

**Aspiration Hazard**

| Name                 | Value             |
|----------------------|-------------------|
| Petroleum Distillate | Aspiration hazard |
| n-Hexane             | Aspiration hazard |
| Toluene              | Aspiration hazard |

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

**SECTION 12: Ecological information**

**Ecotoxicological information**

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

### Chemical fate information

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

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

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

Incinerate in a permitted waste incineration facility. 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), D035 (Methyl ethyl ketone)

## 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):**

| <u>Ingredient</u> | <u>C.A.S. No</u> | <u>% by Wt</u> |
|-------------------|------------------|----------------|
| Toluene           | 108-88-3         | 1 - 10         |
| n-Hexane (Hexane) | 110-54-3         | 5 - 20         |
| n-Hexane          | 110-54-3         | 5 - 20         |

### 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.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health:** 2 **Flammability:** 3 **Instability:** 0 **Special Hazards:** None

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

|                        |           |                         |          |
|------------------------|-----------|-------------------------|----------|
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