

## Safety Data Sheet

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## **SECTION 1: Identification**

#### 1.1. Product identifier

 $3M^{\mbox{\tiny TM}}$  Fastbond  $^{\mbox{\tiny TM}}$  Contact Adhesive 30-NF, Neutral

**Product Identification Numbers** 62-4274-6530-7, 62-4274-6535-6, 62-4274-7530-6, 62-4274-7535-5, 62-4274-8530-5, 62-4274-9530-4

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

**Recommended use** water based contact adhesive, Industrial use

1.3. Supplier's details

| MANUFACTURER:    | 3M                                      |
|------------------|---|
| <b>DIVISION:</b> | Industrial Adhesives and Tapes Division |
| ADDRESS:         | 3M Center, St. Paul, MN 55144-1000, USA |
| Telephone:       | 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

Skin Sensitizer: Category 1. Reproductive Toxicity: Category 1B. Specific Target Organ Toxicity (single exposure): Category 1. Specific Target Organ Toxicity (repeated exposure): Category 1.

**2.2. Label elements Signal word** Danger

Symbols Exclamation mark | Health Hazard |

#### Pictograms



Hazard Statements May cause an allergic skin reaction. May damage fertility or the unborn child.

Causes damage to organs: sensory organs |

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. Do not breathe dust/fume/gas/mist/vapors/spray. 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 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 ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF exposed or concerned: Get medical advice/attention. Specific treatment (see Notes to Physician on this label).

#### Storage:

Store locked up.

#### **Disposal:**

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

#### Notes to Physician:

This product contains methanol. If there is a reasonable suspicion of methanol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the medical management.

## 2.3. Hazards not otherwise classified

None.

6% of the mixture consists of ingredients of unknown acute dermal toxicity. 14% of the mixture consists of ingredients of unknown acute inhalation toxicity.

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

| Ingredient                               | C.A.S. No. | % by Wt                  |
|--|------------|--------------------------|
| Water                                    | 7732-18-5  | 30 - 60 Trade Secret *   |
| Polychloroprene                          | 9010-98-4  | 25 - 50 Trade Secret *   |
| Glycerol Esters of Rosin Acids           | 8050-31-5  | 5 - 10 Trade Secret *    |
| Rosin, Polymer with Phenol               | 68083-03-4 | 3 - 7 Trade Secret *     |
| Methyl Alcohol                           | 67-56-1    | 1 - 5 Trade Secret *     |
| Zinc Oxide                               | 1314-13-2  | 1 - 5 Trade Secret *     |
| Toluene                                  | 108-88-3   | 1 - 3 Trade Secret *     |
| 2,2'-Methylenebis[6-tert-Butyl-p-Cresol] | 119-47-1   | 0.1 - < 1 Trade Secret * |
| Rosin                                    | 8050-09-7  | 0.1 - 1 Trade Secret *   |
| Potassium Hydroxide                      | 1310-58-3  | < 0.5 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 for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

#### If Swallowed:

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

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

See Section 11.1. Information on toxicological effects.

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

This product contains methanol. If there is a reasonable suspicion of methanol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the medical management.

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

#### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

## **5.2. Special hazards arising from the substance or mixture** None inherent in this product.

#### Hazardous Decomposition or By-Products

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

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

No special protective actions for fire-fighters are anticipated.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

#### **6.2.** Environmental precautions

Avoid release to the environment. 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

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Contain spill. 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. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with water. 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. 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.) Use personal protective equipment (gloves, respirators, etc.) as required.

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

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   | ACGIH  | TWA:20 ppm                 | A4: Not class. as human |
|                     |            |        |                            | carcin                  |
| Toluene             | 108-88-3   | CMRG   | STEL:75 ppm                | Skin Notation           |
| Toluene             | 108-88-3   | OSHA   | TWA:200 ppm;CEIL:300 ppm   |                         |
| Potassium Hydroxide | 1310-58-3  | ACGIH  | CEIL:2 mg/m3               |                         |
| 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            |                       |
| Methyl Alcohol | 67-56-1   | ACGIH | TWA:200 ppm;STEL:250 ppm     | Skin Notation         |
| Methyl Alcohol | 67-56-1   | OSHA  | TWA:260 mg/m3(200 ppm)       |                       |
| Rosin          | 8050-09-7 | ACGIH | Limit value not established: | Dermal/Respiratory    |
|                |           |       |                              | Sensitizer, Cntrl all |
|                |           |       |                              | exposr-low as possib  |

ACGIH : American Conference of Governmental Industrial Hygienists

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.

#### 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

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

Half facepiece or full facepiece supplied-air respirator

Organic vapor respirators may have short service life.

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

## **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties **General Physical Form:** 

Liquid

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

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

#### 10.2. Chemical stability

Stable.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

**10.4. Conditions to avoid** Heat

**10.5. Incompatible materials** Strong acids Strong oxidizing agents

#### 10.6. Hazardous decomposition products

**Substance** 

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

**Condition** 

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:

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

#### **Eye Contact:**

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

#### **Ingestion:**

May be harmful if swallowed. 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:

May cause blindness.

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

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

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

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

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

#### **Reproductive/Developmental Toxicity:**

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

#### **Toxicological Data**

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

#### **Acute Toxicity**

| Name            | Route                      | Species | Value   |
|-----------------|----------------------------|---------|---|
| Overall product | Dermal                     |         | No data available; calculated ATE > 5,000 mg/kg |
| Overall product | Inhalation-<br>Vapor(4 hr) |         | No data available; calculated ATE > 50 mg/l     |

| Overall product                          | Ingestion   |        | No data available; calculated ATE 2,000 - 5,000 |
|--|-------------|--------|---|
| Polychloroprene                          | Dermal      |        | mg/kg<br>LD50 estimated to be $> 5,000$ mg/kg   |
| Polychloroprene                          | Ingestion   | Rat    | LD50 > 20,000 mg/kg                             |
| Rosin, Polymer with Phenol               | Ingestion   | Kut    | LD50 > 20,000 mg/kg                             |
| Glycerol Esters of Rosin Acids           | Dermal      | Rabbit | LD50 > 5,000 mg/kg                              |
| Glycerol Esters of Rosin Acids           | Ingestion   | Rat    | LD50 > 2,000  mg/kg                             |
| Toluene                                  | Dermal      | Rat    | LD50 12,000 mg/kg                               |
| Toluene                                  | Inhalation- | Rat    | LC50 30 mg/l                                    |
|  | Vapor (4    |        |   |
|  | hours)      |        |   |
| Toluene                                  | Ingestion   | Rat    | LD50 5,550 mg/kg                                |
| Methyl Alcohol                           | Dermal      |        | LD50 estimated to be 1,000 - 2,000 mg/kg        |
| Methyl Alcohol                           | Inhalation- |        | LC50 estimated to be 10 - 20 mg/l               |
|  | Vapor       |        | _   |
| Methyl Alcohol                           | Ingestion   |        | LD50 estimated to be 50 - 300 mg/kg             |
| Zinc Oxide                               | Dermal      |        | LD50 estimated to be > 5,000 mg/kg              |
| Zinc Oxide                               | Inhalation- | Rat    | LC50 > 5.7 mg/l                                 |
|  | Dust/Mist   |        |   |
|  | (4 hours)   |        |   |
| Zinc Oxide                               | Ingestion   | Rat    | LD50 > 5,000 mg/kg                              |
| Rosin                                    | Dermal      | Rabbit | LD50 > 2,500 mg/kg                              |
| Rosin                                    | Ingestion   | Rat    | LD50 7,600 mg/kg                                |
| Potassium Hydroxide                      | Dermal      | Rabbit | LD50 > 1,260 mg/kg                              |
| Potassium Hydroxide                      | Ingestion   | Rat    | LD50 273 mg/kg                                  |
| 2,2'-Methylenebis[6-tert-Butyl-p-Cresol] | Dermal      | Rabbit | LD50 > 10,000 mg/kg                             |
| 2,2'-Methylenebis[6-tert-Butyl-p-Cresol] | Ingestion   | Rat    | LD50 > 5,000 mg/kg                              |

ATE = acute toxicity estimate

## **Skin Corrosion/Irritation**

| Name                           | Species | Value                     |
|--------------------------------|---------|---------------------------|
|                                |         |                           |
| Polychloroprene                | Human   | No significant irritation |
| Glycerol Esters of Rosin Acids | Rabbit  | Minimal irritation        |
| Toluene                        | Rabbit  | Irritant                  |
| Methyl Alcohol                 | Rabbit  | Mild irritant             |
| Zinc Oxide                     | Human   | No significant irritation |
|                                | and     |                           |
|                                | animal  |                           |
| Rosin                          | Rabbit  | No significant irritation |
| Potassium Hydroxide            | Rabbit  | Corrosive                 |

## Serious Eye Damage/Irritation

| Name                           | Species   | Value                     |
|--------------------------------|-----------|---------------------------|
|                                |           |                           |
| Polychloroprene                | Professio | No significant irritation |
|                                | nal       |                           |
|                                | judgeme   |                           |
|                                | nt        |                           |
| Glycerol Esters of Rosin Acids | Rabbit    | Mild irritant             |
| Toluene                        | Rabbit    | Moderate irritant         |
| Methyl Alcohol                 | Rabbit    | Moderate irritant         |
| Zinc Oxide                     | Rabbit    | Mild irritant             |
| Rosin                          | Rabbit    | Mild irritant             |
| Potassium Hydroxide            | Rabbit    | Corrosive                 |

## Skin Sensitization

| Name                           | Species | Value           |
|--------------------------------|---------|-----------------|
| Glycerol Esters of Rosin Acids | Guinea  | Not sensitizing |
|                                | pig     |                 |
| Toluene                        | Guinea  | Not sensitizing |
|                                | pig     |                 |
| Methyl Alcohol                 | Guinea  | Not sensitizing |

|            | pig    |  |
|------------|--------|--|
| Zinc Oxide | Guinea | Some positive data exist, but the data are not |
|            | pig    | sufficient for classification                  |
| Rosin      | Guinea | Sensitizing                                    |
|            | pig    |  |

## **Respiratory Sensitization**

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

## Germ Cell Mutagenicity

| Name                           | Route    | Value  |
|--------------------------------|----------|--|
|                                |          |  |
| Glycerol Esters of Rosin Acids | In Vitro | Not mutagenic  |
| Toluene                        | In Vitro | Not mutagenic  |
| Toluene                        | In vivo  | Not mutagenic  |
| Methyl Alcohol                 | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Methyl Alcohol                 | In vivo  | Some positive data exist, but the data are not sufficient for classification |
| Zinc Oxide                     | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Zinc Oxide                     | In vivo  | Some positive data exist, but the data are not sufficient for classification |

## Carcinogenicity

| Name           | Route      | Species  | Value  |
|----------------|------------|----------|--|
| 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                  |
| Methyl Alcohol | Inhalation | Multiple | Not carcinogenic                               |
|                |            | animal   |  |
|                |            | species  |  |

## **Reproductive Toxicity**

## **Reproductive and/or Developmental Effects**

| Name           | Route      | Value  | Species  | Test Result              | Exposure<br>Duration        |
|----------------|------------|--|----------|--------------------------|-----------------------------|
| Toluene        | Inhalation | Some positive female reproductive data<br>exist, but the data are not sufficient for<br>classification | Human    | NOAEL Not<br>available   | occupational<br>exposure    |
| Toluene        | Inhalation | Some positive male reproductive data<br>exist, but the data are not sufficient for<br>classification   | Rat      | NOAEL 2.3<br>mg/l        | 1 generation                |
| Toluene        | Ingestion  | Toxic to development   | Rat      | LOAEL 520<br>mg/kg/day   | during gestation            |
| Toluene        | Inhalation | Toxic to development   | Human    | NOAEL Not<br>available   | poisoning<br>and/or abuse   |
| Methyl Alcohol | Ingestion  | Some positive male reproductive data<br>exist, but the data are not sufficient for<br>classification   | Rat      | NOAEL 1,600<br>mg/kg/day | 21 days                     |
| Methyl Alcohol | Ingestion  | Toxic to development   | Mouse    | LOAEL 4,000<br>mg/kg/day | during<br>organogenesi<br>s |
| Methyl Alcohol | Inhalation | Toxic to development   | Mouse    | NOAEL 1.3<br>mg/l        | during<br>organogenesi<br>s |
| Zinc Oxide     | Ingestion  | Some positive  | Multiple | NOAEL 125                | premating &                 |

|  |           | reproductive/developmental data exist,<br>but the data are not sufficient for<br>classification        | animal<br>species | mg/kg/day               | during<br>gestation                |
|--|-----------|--|-------------------|-------------------------|------------------------------------|
| 2,2'-Methylenebis[6-tert-Butyl-p-Cresol] | Ingestion | Some positive female reproductive data<br>exist, but the data are not sufficient for<br>classification | Rat               | NOAEL 50<br>mg/kg/day   | premating &<br>during<br>gestation |
| 2,2'-Methylenebis[6-tert-Butyl-p-Cresol] | Ingestion | Toxic to male reproduction   | Rat               | NOAEL 12.5<br>mg/kg/day | 50 days                            |

## Target Organ(s)

## Specific Target Organ Toxicity - single exposure

| Name                | Route      | Target Organ(s)                      | Value  | Species | Test Result            | Exposure<br>Duration      |
|---------------------|------------|--------------------------------------|--|---------|------------------------|---------------------------|
| Toluene             | Inhalation | central nervous<br>system depression | May cause drowsiness or<br>dizziness   | Human   | NOAEL Not available    |                           |
| Toluene             | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | Human   | NOAEL Not<br>available |                           |
| Toluene             | Inhalation | immune system                        | Some positive data exist, but the data are not sufficient for classification | Mouse   | NOAEL<br>0.004 mg/l    | 3 hours                   |
| Toluene             | Ingestion  | central nervous<br>system depression | May cause drowsiness or<br>dizziness   | Human   | NOAEL Not<br>available | poisoning<br>and/or abuse |
| Methyl Alcohol      | Inhalation | blindness                            | Causes damage to organs  | Human   | NOAEL Not available    | occupational exposure     |
| Methyl Alcohol      | Inhalation | central nervous<br>system depression | May cause drowsiness or<br>dizziness   | Human   | NOAEL Not<br>available | not available             |
| Methyl Alcohol      | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | Rat     | NOAEL Not<br>available | 6 hours                   |
| Methyl Alcohol      | Ingestion  | blindness                            | Causes damage to organs  | Human   | NOAEL Not<br>available | poisoning<br>and/or abuse |
| Methyl Alcohol      | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  | Human   | NOAEL Not<br>available | poisoning<br>and/or abuse |
| Potassium Hydroxide | Inhalation | respiratory irritation               | May cause respiratory irritation   | Human   | NOAEL not<br>available |                           |

## Specific Target Organ Toxicity - repeated exposure

| Name                              | Route      | Target Organ(s)  | Value  | Species | Test Result                 | Exposure<br>Duration      |
|-----------------------------------|------------|--|--|---------|-----------------------------|---------------------------|
| Glycerol Esters of Rosin<br>Acids | Ingestion  | liver  | Some positive data exist, but the data are not sufficient for classification | Rat     | NOAEL<br>5,000<br>mg/kg/day | 90 days                   |
| Glycerol Esters of Rosin<br>Acids | Ingestion  | heart   skin  <br>endocrine system  <br>bone, teeth, nails,<br>and/or hair   blood  <br>bone marrow  <br>hematopoietic<br>system   immune<br>system   muscles  <br>nervous system  <br>eyes   kidney and/or<br>bladder   respiratory<br>system | All data are negative  | Rat     | NOAEL<br>5,000<br>mg/kg/day | 90 days                   |
| Toluene                           | Inhalation | auditory system  <br>nervous system  <br>eyes   olfactory<br>system  | Causes damage to organs through prolonged or repeated exposure               | Human   | NOAEL Not<br>available      | poisoning<br>and/or abuse |
| Toluene                           | Inhalation | respiratory system   | Some positive data exist, but the data are not sufficient for classification | Rat     | LOAEL 2.3<br>mg/l           | 15 months                 |
| Toluene                           | Inhalation | heart   liver   kidney<br>and/or bladder   | Some positive data exist, but the data are not sufficient for classification | Rat     | NOAEL 11.3<br>mg/l          | 15 weeks                  |
| Toluene                           | Inhalation | endocrine system   | Some positive data exist, but the  | Rat     | NOAEL 1.1                   | 4 weeks                   |

|                |            |  | data are not sufficient for classification                                   |                               | mg/l                        |                          |
|----------------|------------|--|--|-------------------------------|-----------------------------|--------------------------|
| Toluene        | Inhalation | immune system  | Some positive data exist, but the data are not sufficient for classification | Mouse                         | NOAEL Not<br>available      | 20 days                  |
| Toluene        | Inhalation | bone, teeth, nails,<br>and/or hair                                       | Some positive data exist, but the data are not sufficient for classification | Mouse                         | NOAEL 1.1<br>mg/l           | 8 weeks                  |
| Toluene        | Inhalation | hematopoietic<br>system   vascular<br>system                             | Some positive data exist, but the data are not sufficient for classification | Human                         | NOAEL Not<br>available      | occupational<br>exposure |
| Toluene        | Ingestion  | nervous system   | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL 625<br>mg/kg/day      | 13 weeks                 |
| Toluene        | Ingestion  | heart  | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL<br>2,500<br>mg/kg/day | 13 weeks                 |
| Toluene        | Ingestion  | liver   kidney and/or<br>bladder   | Some positive data exist, but the data are not sufficient for classification | Multiple<br>animal<br>species | NOAEL<br>2,500<br>mg/kg/day | 13 weeks                 |
| Toluene        | Ingestion  | hematopoietic<br>system  | Some positive data exist, but the data are not sufficient for classification | Mouse                         | NOAEL 600<br>mg/kg/day      | 14 days                  |
| Toluene        | Ingestion  | endocrine system   | Some positive data exist, but the data are not sufficient for classification | Mouse                         | NOAEL 105<br>mg/kg/day      | 28 days                  |
| Toluene        | Ingestion  | immune system  | Some positive data exist, but the data are not sufficient for classification | Mouse                         | NOAEL 105<br>mg/kg/day      | 4 weeks                  |
| Methyl Alcohol | Inhalation | liver  | All data are negative  | Rat                           | NOAEL 6.55<br>mg/l          | 4 weeks                  |
| Methyl Alcohol | Inhalation | respiratory system   | All data are negative  | Rat                           | NOAEL 13.1<br>mg/l          | 6 weeks                  |
| Methyl Alcohol | Ingestion  | liver   nervous<br>system  | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL<br>2,500<br>mg/kg/day | 90 days                  |
| Zinc Oxide     | Ingestion  | nervous system   | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL 600<br>mg/kg/day      | 10 days                  |
| Zinc Oxide     | Ingestion  | endocrine system  <br>hematopoietic<br>system   kidney<br>and/or bladder | Some positive data exist, but the data are not sufficient for classification | Other                         | NOAEL 500<br>mg/kg/day      | 6 months                 |

# Aspiration Hazard Name Value Toluene Aspiration hazard

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

## **SECTION 12: Ecological information**

#### **Ecotoxicological information**

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

## **Chemical fate information**

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

## **SECTION 13: Disposal considerations**

#### **13.1. Disposal methods**

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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): Not regulated

## **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 - No 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 | <u>% by Wt</u>     |
|-----------------------------|-----------|--------------------|
| Toluene                     | 108-88-3  | Trade Secret 1 - 3 |
| Methyl Alcohol              | 67-56-1   | Trade Secret 1 - 5 |
| Zinc Oxide (ZINC COMPOUNDS) | 1314-13-2 | 1 - 5              |

#### **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: 1 Instability: 0 Special Hazards: None

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

| Document Group: | 10-2980-0 | Version Number:  | 46.02    |
|-----------------|-----------|------------------|----------|
| Issue Date:     | 11/17/15  | Supercedes Date: | 11/16/15 |

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