



## Safety Data Sheet

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|                        |            |                         |            |
|------------------------|------------|-------------------------|------------|
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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006) as amended by Regulation (EU) 2020/878

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

3M™ Super 77™ Cylinder Spray Adhesive (clear or red)

#### Product Identification Numbers

62-4979-8032-6

7100138125

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### Identified uses

Industrial use.

#### 1.3. Details of the supplier of the safety data sheet

**Address:** 3M Ireland Limited, 70 SIR JOHN ROGERSON'S QUAY, D02R296 DUBLIN 2  
**Telephone:** +353 1 280 3555  
**E Mail:** ner-productstewardship@mmm.com  
**Website:** www.3M.com

#### 1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.

The aspiration hazard classification is not required due to the product's physical form.

**CLASSIFICATION:**

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Skin Sensitization, Category 1 - Skin Sens. 1; H317  
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336  
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

**2.2. Label elements**

**CLP REGULATION (EC) No 1272/2008**

**SIGNAL WORD**

WARNING.

**Symbols**

GHS07 (Exclamation mark) |GHS09 (Environment) |

**Pictograms**



**Ingredients:**

| Ingredient   | CAS Nbr      | EC No.    | % by Wt |
|--|--------------|-----------|---------|
| Hexane, mix  | 601-007-00-7 |           | 15 - 40 |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 1065336-91-5 | 915-687-0 | < 0.2   |

**HAZARD STATEMENTS:**

|      |  |
|------|--|
| H315 | Causes skin irritation.                          |
| H317 | May cause an allergic skin reaction.             |
| H336 | May cause drowsiness or dizziness.               |
| H411 | Toxic to aquatic life with long lasting effects. |

**PRECAUTIONARY STATEMENTS**

**Prevention:**

|       |                                   |
|-------|-----------------------------------|
| P261E | Avoid breathing vapour or spray.  |
| P273  | Avoid release to the environment. |
| P280E | Wear protective gloves.           |

**Response:**

|             |  |
|-------------|--|
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P391        | Collect spillage.  |

Contains 8% of components with unknown hazards to the aquatic environment.

**2.3. Other hazards**

May displace oxygen and cause rapid suffocation.  
This material does not contain any substances that are assessed to be a PBT or vPvB

**SECTION 3: Composition/information on ingredients****3.1. Substances**

Not applicable

**3.2. Mixtures**

| <b>Ingredient</b>   | <b>Identifier(s)</b>   | <b>%</b> | <b>Classification according to Regulation (EC) No. 1272/2008 [CLP]</b>  |
|---|--|----------|---|
| Hexane, mix   | (CAS-No.) 601-007-00-7   | 15 - 40  | Flam. Liq. 2, H225<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Aquatic Chronic 2, H411<br>Nota C                        |
| Non-Volatile Components   | Trade Secret   | 10 - 35  | Substance not classified as hazardous   |
| dimethyl ether  | (CAS-No.) 115-10-6<br>(EC-No.) 204-065-8<br>(REACH-No.) 01-2119472128-37 | 10 - 30  | Flam. Gas 1A, H220<br>Liquified gas, H280<br>Nota U   |
| cyclohexane   | (CAS-No.) 110-82-7<br>(EC-No.) 203-806-2<br>(REACH-No.) 01-2119463273-41 | 10 - 24  | Flam. Liq. 2, H225<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Aquatic Acute 1, H400,M=1<br>Aquatic Chronic 1, H410,M=1 |
| Terpene Phenolic  | Trade Secret   | < 10     | Substance not classified as hazardous   |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane | (CAS-No.) 31393-98-3   | < 10     | Aquatic Chronic 4, H413   |
| isobutane   | (CAS-No.) 75-28-5<br>(EC-No.) 200-857-2<br>(REACH-No.) 01-2119485395-27  | 3 - 7    | Flam. Gas 1A, H220<br>Liquified gas, H280<br>Nota C,U   |
| propane   | (CAS-No.) 74-98-6<br>(EC-No.) 200-827-9<br>(REACH-No.) 01-2119486944-21  | 3 - 7    | Flam. Gas 1A, H220<br>Liquified gas, H280<br>Nota U   |
| pentane   | (CAS-No.) 109-66-0<br>(EC-No.) 203-692-4                                 | < 5      | Flam. Liq. 2, H225<br>Asp. Tox. 1, H304<br>STOT SE 3, H336<br>EUH066<br>Aquatic Chronic 2, H411<br>Nota C                                     |
| ethanol   | (CAS-No.) 64-17-5<br>(EC-No.) 200-578-6<br>(REACH-No.) 01-2119457610-43  | < 5      | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319  |
| n-hexane  | (CAS-No.) 110-54-3<br>(EC-No.) 203-777-6                                 | < 0.5    | Flam. Liq. 2, H225<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>Repr. 2, H361f<br>STOT SE 3, H336<br>STOT RE 1, H372                        |

|  |  |       |   |
|--|--|-------|---|
|  |  |       | Aquatic Chronic 2, H411   |
| toluene  | (CAS-No.) 108-88-3<br>(EC-No.) 203-625-9     | < 0.3 | Flam. Liq. 2, H225<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>Repr. 2, H361d<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Aquatic Chronic 3, H412 |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | (CAS-No.) 1065336-91-5<br>(EC-No.) 915-687-0 | < 0.2 | Skin Sens. 1A, H317<br>Repr. 2, H361f<br>Aquatic Acute 1, H400,M=1<br>Aquatic Chronic 1, H410,M=1   |

Any entry in the Identifier(s) column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance. Please see section 16 for the full text of any H statements referred to in this section

### Specific Concentration Limits

| Ingredient | Identifier(s)   | Specific Concentration Limits |
|------------|---|-------------------------------|
| ethanol    | (CAS-No.) 64-17-5<br>(EC-No.) 200-578-6<br>(REACH-No.) 01-2119457610-43 | (C >= 50%) Eye Irrit. 2, H319 |

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation

Remove person to fresh air. 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

The most important symptoms and effects based on the CLP classification include:

Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

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

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

## SECTION 5: Fire-fighting measures

### 5.1. 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

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. |
| formaldehyde     | During combustion. |
| Carbon monoxide  | During combustion. |
| Carbon dioxide.  | During combustion. |

### 5.3. Advice for fire-fighters

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

## SECTION 6: Accidental release measures

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

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS.

### 6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dykes 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. 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 metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Do not handle until all safety precautions have been

read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

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

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store away from heat. Store away from acids. Store away from oxidising agents.

### 7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

## 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     | CAS Nbr  | Agency       | Limit type  | Additional comments |
|----------------|----------|--------------|---|---------------------|
| toluene        | 108-88-3 | Ireland OELs | TWA(8 hours):192 mg/m <sup>3</sup> (50 ppm);TWA(8 hours):50 ppm(192 mg/m <sup>3</sup> );STEL(15 minutes):384 mg/m <sup>3</sup> (100 ppm);STEL(15 minutes):100 ppm(384 mg/m <sup>3</sup> ) | SKIN                |
| pentane        | 109-66-0 | Ireland OELs | TWA(8 hours):3000 mg/m <sup>3</sup> (1000 ppm);TWA(8 hours):1000 ppm(3000 mg/m <sup>3</sup> )   |                     |
| n-hexane       | 110-54-3 | Ireland OELs | TWA(8 hours):72 mg/m <sup>3</sup> (20 ppm);TWA(8 hours):20 ppm(72 mg/m <sup>3</sup> )   | SKIN                |
| cyclohexane    | 110-82-7 | Ireland OELs | TWA(8 hours):700 mg/m <sup>3</sup> (200 ppm);TWA(8 hours):200 ppm(700 mg/m <sup>3</sup> )   |                     |
| dimethyl ether | 115-10-6 | Ireland OELs | TWA(8 hours):1920 mg/m <sup>3</sup> (1000 ppm);TWA(8 hours):1000 ppm(1920 mg/m <sup>3</sup> )   |                     |
| ethanol        | 64-17-5  | Ireland OELs | STEL(15 minutes):1000 ppm   |                     |
| isobutane      | 75-28-5  | Ireland OELs | STEL(15 minutes):1000 ppm   |                     |

Ireland OELs : Ireland. OELs  
TWA: Time-Weighted-Average  
STEL: Short Term Exposure Limit  
CEIL: Ceiling

#### Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

**Recommended monitoring procedures:**Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

Do not remain in area where available oxygen may be reduced. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

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

**Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:  
 Safety glasses with side shields.  
 Indirect vented goggles.

*Applicable Norms/Standards*

Use eye protection conforming to EN 16321

**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:

| <b>Material</b>  | <b>Thickness (mm)</b> | <b>Breakthrough Time</b> |
|------------------|-----------------------|--------------------------|
| Nitrile rubber.  | No data available     | No data available        |
| Polymer laminate | No data available     | No data available        |

*Applicable Norms/Standards*

Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

**Respiratory protection**

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

- Half facepiece or full facepiece air-purifying respirator suitable for organic vapours
- Half facepiece or full facepiece supplied-air respirator
- Organic vapor cartridges may have short service life.

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

*Applicable Norms/Standards*

Use a respirator conforming to EN 140 or EN 136  
 Use a respirator conforming to EN 140 or EN 136: filter type A

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

|                       |            |
|-----------------------|------------|
| <b>Physical state</b> | Liquid.    |
| <b>Colour</b>         | Multicolor |

|   |   |
|---|---|
| <b>Odor</b>                                   | Mild Solvent  |
| <b>Odour threshold</b>                        | <i>No data available.</i>   |
| <b>Melting point/freezing point</b>           | <i>Not applicable.</i>  |
| <b>Boiling point/boiling range</b>            | <=20 °C   |
| <b>Flammability</b>                           | Not applicable.   |
| <b>Flammable Limits(LEL)</b>                  | 1.2 % volume  |
| <b>Flammable Limits(UEL)</b>                  | 27 % volume   |
| <b>Flash point</b>                            | -45.6 °C [ <i>Test Method: Closed Cup</i> ] [ <i>Details: Flammable Gas</i> ] |
| <b>Autoignition temperature</b>               | <i>No data available.</i>   |
| <b>Decomposition temperature</b>              | <i>Not applicable.</i>  |
| <b>pH</b>                                     | <i>substance/mixture is non-soluble (in water)</i>                            |
| <b>Kinematic Viscosity</b>                    | <i>Not applicable.</i>  |
| <b>Water solubility</b>                       | Nil   |
| <b>Solubility- non-water</b>                  | <i>No data available.</i>   |
| <b>Partition coefficient: n-octanol/water</b> | <i>No data available.</i>   |
| <b>Vapour pressure</b>                        | 84.7 psia [ <i>@ 68 °F</i> ]  |
| <b>Density</b>                                | 0.735 g/ml  |
| <b>Relative density</b>                       | 0.735 [ <i>Ref Std: WATER=1</i> ]   |
| <b>Relative Vapour Density</b>                | >=1 [ <i>Ref Std: AIR=1</i> ]   |
| <b>Particle Characteristics</b>               | <i>Not applicable.</i>  |

## 9.2. Other information

### 9.2.2 Other safety characteristics

|                               |                           |
|-------------------------------|---------------------------|
| EU Volatile Organic Compounds | <i>No data available.</i> |
| Evaporation rate              | <i>No data available.</i> |
| Molecular weight              | <i>No data available.</i> |
| Solids content                | 20 - 30 %                 |

## 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 polymerisation will not occur.

### 10.4 Conditions to avoid

Heat.  
Sparks and/or flames.

### 10.5 Incompatible materials

Strong oxidising 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 agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from internal hazard assessments.

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Signs and Symptoms of Exposure

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

##### Inhalation

Simple asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal. 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 localised redness, swelling, itching, and dryness. 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 diarrhoea. 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. Single exposure, above recommended guidelines, may cause: Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

##### Reproductive/Developmental Toxicity:

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

#### Additional information:

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

#### 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**

| <b>Name</b>  | <b>Route</b>                | <b>Species</b>         | <b>Value</b>                                   |
|--|-----------------------------|------------------------|--|
| Overall product  | Dermal                      |                        | No data available; calculated ATE >5,000 mg/kg |
| Overall product  | Inhalation-Vapour(4 hr)     |                        | No data available; calculated ATE >50 mg/l     |
| Overall product  | Ingestion                   |                        | No data available; calculated ATE >5,000 mg/kg |
| Hexane, mix  | Dermal                      |                        | LD50 estimated to be > 5,000 mg/kg             |
| Hexane, mix  | Inhalation-Vapour           |                        | LC50 estimated to be > 50 mg/l                 |
| Hexane, mix  | Ingestion                   |                        | LD50 estimated to be > 5,000 mg/kg             |
| dimethyl ether   | Inhalation-Gas (4 hours)    | Rat                    | LC50 164,000 ppm                               |
| cyclohexane  | Dermal                      | Rat                    | LD50 > 2,000 mg/kg                             |
| cyclohexane  | Inhalation-Vapour (4 hours) | Rat                    | LC50 > 32.9 mg/l                               |
| cyclohexane  | Ingestion                   | Rat                    | LD50 6,200 mg/kg                               |
| Non-Volatile Components  | Dermal                      |                        | LD50 estimated to be > 5,000 mg/kg             |
| Non-Volatile Components  | Ingestion                   |                        | LD50 estimated to be 2,000 - 5,000 mg/kg       |
| isobutane  | Inhalation-Gas (4 hours)    | Rat                    | LC50 276,000 ppm                               |
| propane  | Inhalation-Gas (4 hours)    | Rat                    | LC50 > 200,000 ppm                             |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane                    | Dermal                      | Professional judgement | LD50 estimated to be > 5,000 mg/kg             |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane                    | Ingestion                   | Rat                    | LD50 > 2,000 mg/kg                             |
| Terpene Phenolic   | Dermal                      | Professional judgement | LD50 estimated to be > 5,000 mg/kg             |
| Terpene Phenolic   | Ingestion                   | Rat                    | LD50 > 7,000 mg/kg                             |
| pentane  | Dermal                      | Rabbit                 | LD50 3,000 mg/kg                               |
| pentane  | Inhalation-Vapour (4 hours) | Rat                    | LC50 > 18 mg/l                                 |
| pentane  | Ingestion                   | Rat                    | LD50 > 2,000 mg/kg                             |
| ethanol  | Dermal                      | Rabbit                 | LD50 > 15,800 mg/kg                            |
| ethanol  | Inhalation-Vapour (4 hours) | Rat                    | LC50 124.7 mg/l                                |
| ethanol  | Ingestion                   | Rat                    | LD50 17,800 mg/kg                              |
| n-hexane   | Dermal                      | Rabbit                 | LD50 > 2,000 mg/kg                             |
| n-hexane   | Inhalation-Vapour (4 hours) | Rat                    | LC50 170 mg/l                                  |
| n-hexane   | Ingestion                   | Rat                    | LD50 > 28,700 mg/kg                            |
| toluene  | Dermal                      | Rat                    | LD50 12,000 mg/kg                              |
| toluene  | Inhalation-Vapour (4 hours) | Rat                    | LC50 30 mg/l                                   |
| toluene  | Ingestion                   | Rat                    | LD50 5,550 mg/kg                               |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Dermal                      | Professional judgement | LD50 estimated to be 2,000 - 5,000 mg/kg       |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion                   | Rat                    | LD50 3,125 mg/kg                               |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name   | Species                | Value                     |
|--|------------------------|---------------------------|
| Hexane, mix  | Professional judgement | Mild irritant             |
| cyclohexane  | Rabbit                 | Mild irritant             |
| Non-Volatile Components  | Professional judgement | Minimal irritation        |
| isobutane  | Professional judgement | No significant irritation |
| propane  | Rabbit                 | Minimal irritation        |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane                    | In vitro data          | No significant irritation |
| pentane  | Rabbit                 | Minimal irritation        |
| ethanol  | Rabbit                 | No significant irritation |
| n-hexane   | Human and animal       | Mild irritant             |
| toluene  | Rabbit                 | Irritant                  |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Rabbit                 | Minimal irritation        |

**Serious Eye Damage/Irritation**

| Name   | Species                | Value                     |
|--|------------------------|---------------------------|
| Hexane, mix  | Professional judgement | Moderate irritant         |
| cyclohexane  | Rabbit                 | Mild irritant             |
| isobutane  | Professional judgement | No significant irritation |
| propane  | Rabbit                 | Mild irritant             |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane                    | In vitro data          | No significant irritation |
| pentane  | Rabbit                 | Mild irritant             |
| ethanol  | Rabbit                 | Severe irritant           |
| n-hexane   | Rabbit                 | Mild irritant             |
| toluene  | Rabbit                 | Moderate irritant         |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Rabbit                 | Mild irritant             |

**Skin Sensitisation**

| Name  | Species                 | Value  |
|---|-------------------------|--|
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane | Multiple animal species | Not classified   |
| Terpene Phenolic  | Human                   | Some positive data exist, but the data are not sufficient for classification |
| pentane   | Guinea pig              | Not classified   |
| ethanol   | Human                   | Not classified   |
| n-hexane  | Human                   | Not classified   |

**3M™ Super 77™ Cylinder Spray Adhesive (clear or red)**

|  |            |                |
|--|------------|----------------|
| toluene  | Guinea pig | Not classified |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Guinea pig | Sensitising    |

**Respiratory Sensitisation**

For the component/components, either no data is currently available or the data is not sufficient for classification.

**Germ Cell Mutagenicity**

| Name   | Route    | Value  |
|--|----------|--|
| dimethyl ether   | In Vitro | Not mutagenic  |
| dimethyl ether   | In vivo  | Not mutagenic  |
| cyclohexane  | In Vitro | Not mutagenic  |
| cyclohexane  | In vivo  | Some positive data exist, but the data are not sufficient for classification |
| isobutane  | In Vitro | Not mutagenic  |
| propane  | In Vitro | Not mutagenic  |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane                    | In Vitro | Not mutagenic  |
| pentane  | In vivo  | Not mutagenic  |
| pentane  | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| ethanol  | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| ethanol  | In vivo  | Some positive data exist, but the data are not sufficient for classification |
| n-hexane   | In Vitro | Not mutagenic  |
| n-hexane   | In vivo  | Not mutagenic  |
| toluene  | In Vitro | Not mutagenic  |
| toluene  | In vivo  | Not mutagenic  |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | In vivo  | Not mutagenic  |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | In Vitro | Some positive data exist, but the data are not sufficient for classification |

**Carcinogenicity**

| Name           | Route      | Species                 | Value  |
|----------------|------------|-------------------------|--|
| dimethyl ether | Inhalation | Rat                     | Not carcinogenic   |
| ethanol        | Ingestion  | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |
| n-hexane       | Dermal     | Mouse                   | Not carcinogenic   |
| n-hexane       | Inhalation | Mouse                   | Some positive data exist, but the data are not sufficient for classification |
| 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    |
|----------------|------------|--|---------|------------------|----------------------|
| dimethyl ether | Inhalation | Not classified for development         | Rat     | NOAEL 40,000 ppm | during organogenesis |
| cyclohexane    | Inhalation | Not classified for female reproduction | Rat     | NOAEL 24 mg/l    | 2 generation         |
| cyclohexane    | Inhalation | Not classified for male reproduction   | Rat     | NOAEL 24 mg/l    | 2 generation         |

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|  |            |  |       |                       |                                |
|--|------------|--|-------|-----------------------|--------------------------------|
| cyclohexane  | Inhalation | Not classified for development         | Rat   | NOAEL 6.9 mg/l        | 2 generation                   |
| pentane  | Ingestion  | Not classified for development         | Rat   | NOAEL 1,000 mg/kg/day | during organogenesis           |
| pentane  | Inhalation | Not classified for development         | Rat   | NOAEL 30 mg/l         | during organogenesis           |
| ethanol  | Inhalation | Not classified for development         | Rat   | NOAEL 38 mg/l         | during gestation               |
| ethanol  | Ingestion  | Not classified for development         | Rat   | NOAEL 5,200 mg/kg/day | prematuring & during gestation |
| n-hexane   | Ingestion  | Not classified for development         | Mouse | NOAEL 2,200 mg/kg/day | during organogenesis           |
| n-hexane   | Inhalation | Not classified for development         | 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                        |
| toluene  | Inhalation | Not classified for female reproduction | Human | NOAEL Not available   | occupational exposure          |
| toluene  | Inhalation | Not classified for male reproduction   | Rat   | NOAEL 2.3 mg/l        | 1 generation                   |
| toluene  | Ingestion  | Toxic to development                   | Rat   | LOAEL 520 mg/kg/day   | during gestation               |
| toluene  | Inhalation | Toxic to development                   | Human | NOAEL Not available   | poisoning and/or abuse         |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion  | Not classified for male reproduction   | Rat   | NOAEL 1,493 mg/kg/day | 29 days                        |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion  | Not classified for development         | Rat   | NOAEL 209 mg/kg/day   | prematuring into lactation     |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion  | Toxic to female reproduction           | Rat   | NOAEL 804 mg/kg/day   | prematuring into lactation     |

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

| Name           | Route      | Target Organ(s)                   | Value  | Species                | Test result         | Exposure Duration |
|----------------|------------|-----------------------------------|--|------------------------|---------------------|-------------------|
| Hexane, mix    | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Professional judgement | NOAEL Not available |                   |
| Hexane, mix    | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification |                        | NOAEL Not available |                   |
| Hexane, mix    | Inhalation | cardiac sensitisation             | Not classified   | Dog                    | NOAEL Not available |                   |
| Hexane, mix    | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Professional judgement | NOAEL Not available |                   |
| dimethyl ether | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Rat                    | LOAEL 10,000 ppm    | 30 minutes        |
| dimethyl ether | Inhalation | cardiac sensitisation             | Some positive data exist, but the data are not sufficient for classification | Dog                    | NOAEL 100,000 ppm   | 5 minutes         |

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|             |            |                                   |  |                         |                     |                        |
|-------------|------------|-----------------------------------|--|-------------------------|---------------------|------------------------|
| cyclohexane | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human and animal        | NOAEL Not available |                        |
| cyclohexane | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Human and animal        | NOAEL Not available |                        |
| cyclohexane | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Professional judgement  | NOAEL Not available |                        |
| isobutane   | Inhalation | cardiac sensitisation             | Causes damage to organs  | Multiple animal species | NOAEL Not available |                        |
| isobutane   | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human and animal        | NOAEL Not available |                        |
| isobutane   | Inhalation | respiratory irritation            | Not classified   | Mouse                   | NOAEL Not available |                        |
| propane     | Inhalation | cardiac sensitisation             | Causes damage to organs  | Human                   | NOAEL Not available |                        |
| propane     | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human                   | NOAEL Not available |                        |
| propane     | Inhalation | respiratory irritation            | Not classified   | Human                   | NOAEL Not available |                        |
| pentane     | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Multiple animal species | NOAEL Not available | not available          |
| pentane     | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Not available           | NOAEL Not available | not available          |
| pentane     | Inhalation | cardiac sensitisation             | Not classified   | Dog                     | NOAEL Not available | not available          |
| pentane     | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Professional judgement  | NOAEL Not available | not available          |
| ethanol     | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Human                   | LOAEL 9.4 mg/l      | not available          |
| ethanol     | Inhalation | central nervous system depression | Not classified   | Human and animal        | NOAEL not available |                        |
| ethanol     | Ingestion  | central nervous system depression | Not classified   | Multiple animal species | NOAEL not available |                        |
| ethanol     | Ingestion  | kidney and/or bladder             | Not classified   | Dog                     | NOAEL 3,000 mg/kg   |                        |
| 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                | Not classified   | Rat                     | NOAEL 24.6 mg/l     | 8 hours                |
| toluene     | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human                   | NOAEL Not available |                        |
| toluene     | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Human                   | NOAEL Not available |                        |
| toluene     | Inhalation | immune system                     | Not classified   | Mouse                   | NOAEL 0.004 mg/l    | 3 hours                |
| toluene     | Ingestion  | central nervous 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 |
|------|-------|-----------------|-------|---------|-------------|-------------------|
|------|-------|-----------------|-------|---------|-------------|-------------------|

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|   |            |  |  |        |                       |                       |
|---|------------|--|--|--------|-----------------------|-----------------------|
| Hexane, mix   | Inhalation | peripheral nervous system  | Not classified   | Rat    | NOAEL 5.3 mg/l        | 14 weeks              |
| Hexane, mix   | Ingestion  | peripheral nervous system  | Not classified   | Rat    | NOAEL Not available   | 8 weeks               |
| Hexane, mix   | Ingestion  | kidney and/or bladder  | Not classified   | Rat    | LOAEL 2,000 mg/kg     | 28 days               |
| dimethyl ether  | Inhalation | hematopoietic system   | Not classified   | Rat    | NOAEL 25,000 ppm      | 2 years               |
| dimethyl ether  | Inhalation | liver  | Not classified   | Rat    | NOAEL 20,000 ppm      | 30 weeks              |
| cyclohexane   | Inhalation | liver  | Not classified   | Rat    | NOAEL 24 mg/l         | 90 days               |
| cyclohexane   | Inhalation | auditory system  | Not classified   | Rat    | NOAEL 1.7 mg/l        | 90 days               |
| cyclohexane   | Inhalation | kidney and/or bladder  | Not classified   | Rabbit | NOAEL 2.7 mg/l        | 10 weeks              |
| cyclohexane   | Inhalation | hematopoietic system   | Not classified   | Mouse  | NOAEL 24 mg/l         | 14 weeks              |
| cyclohexane   | Inhalation | peripheral nervous system  | Not classified   | Rat    | NOAEL 8.6 mg/l        | 30 weeks              |
| isobutane   | Inhalation | kidney and/or bladder  | Not classified   | Rat    | NOAEL 4,500 ppm       | 13 weeks              |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane | Ingestion  | heart   gastrointestinal tract   hematopoietic system   liver   nervous system   eyes   kidney and/or bladder  | Not classified   | Rat    | NOAEL 331 mg/kg/day   | 90 days               |
| pentane   | Inhalation | peripheral nervous system  | Not classified   | Human  | NOAEL Not available   | occupational exposure |
| pentane   | Inhalation | heart   skin   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system | Not classified   | Rat    | NOAEL 20 mg/l         | 13 weeks              |
| pentane   | Ingestion  | kidney and/or bladder  | Not classified   | Rat    | NOAEL 2,000 mg/kg/day | 28 days               |
| ethanol   | Inhalation | liver  | Some positive data exist, but the data are not sufficient for classification | Rabbit | LOAEL 124 mg/l        | 365 days              |
| ethanol   | Inhalation | hematopoietic system   immune system   | Not classified   | Rat    | NOAEL 25 mg/l         | 14 days               |
| ethanol   | Ingestion  | liver  | Some positive data exist, but the data are not sufficient for classification | Rat    | LOAEL 8,000 mg/kg/day | 4 months              |
| ethanol   | Ingestion  | kidney and/or bladder  | Not classified   | Dog    | NOAEL 3,000 mg/kg/day | 7 days                |
| 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  | Not classified   | Rat    | NOAEL Not available   | 6 months              |
| n-hexane  | Inhalation | kidney and/or bladder  | Not classified   | Rat    | LOAEL 1.76 mg/l       | 6 months              |

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|  |            |   |  |                         |                       |                        |
|--|------------|---|--|-------------------------|-----------------------|------------------------|
| n-hexane   | Inhalation | hematopoietic system  | Not classified   | Mouse                   | NOAEL 35.2 mg/l       | 13 weeks               |
| n-hexane   | Inhalation | auditory system   immune system   eyes  | Not classified   | Human                   | NOAEL Not available   | occupational exposure  |
| n-hexane   | Inhalation | heart   skin   endocrine system   | Not classified   | 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   | Not classified   | Rat                     | NOAEL Not available   | 13 weeks               |
| 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   | Not classified   | Rat                     | NOAEL 11.3 mg/l       | 15 weeks               |
| toluene  | Inhalation | endocrine system  | Not classified   | Rat                     | NOAEL 1.1 mg/l        | 4 weeks                |
| toluene  | Inhalation | immune system   | Not classified   | Mouse                   | NOAEL Not available   | 20 days                |
| toluene  | Inhalation | bone, teeth, nails, and/or hair   | Not classified   | Mouse                   | NOAEL 1.1 mg/l        | 8 weeks                |
| toluene  | Inhalation | hematopoietic system   vascular system  | Not classified   | Human                   | NOAEL Not available   | occupational exposure  |
| toluene  | Inhalation | gastrointestinal tract  | Not classified   | Multiple animal species | NOAEL 11.3 mg/l       | 15 weeks               |
| toluene  | Ingestion  | nervous system  | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 625 mg/kg/day   | 13 weeks               |
| toluene  | Ingestion  | heart   | Not classified   | Rat                     | NOAEL 2,500 mg/kg/day | 13 weeks               |
| toluene  | Ingestion  | liver   kidney and/or bladder   | Not classified   | Multiple animal species | NOAEL 2,500 mg/kg/day | 13 weeks               |
| toluene  | Ingestion  | hematopoietic system  | Not classified   | Mouse                   | NOAEL 600 mg/kg/day   | 14 days                |
| toluene  | Ingestion  | endocrine system  | Not classified   | Mouse                   | NOAEL 105 mg/kg/day   | 28 days                |
| toluene  | Ingestion  | immune system   | Not classified   | Mouse                   | NOAEL 105 mg/kg/day   | 4 weeks                |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion  | eyes  | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 300 mg/kg/day   | 28 days                |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Ingestion  | gastrointestinal tract   liver   immune system   heart   endocrine system   hematopoietic system   nervous system   kidney and/or bladder | Not classified   | Rat                     | NOAEL 1,493 mg/kg/day | 29 days                |

**Aspiration Hazard**

**3M™ Super 77™ Cylinder Spray Adhesive (clear or red)**

| Name        | Value             |
|-------------|-------------------|
| Hexane, mix | Aspiration hazard |
| cyclohexane | Aspiration hazard |
| pentane     | 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.

**11.2. Information on other hazards**

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

**SECTION 12: Ecological information**

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

**12.1. Toxicity**

No product test data available.

| Material  | CAS #        | Organism         | Type  | Exposure | Test endpoint                  | Test result |
|---|--------------|------------------|---|----------|--------------------------------|-------------|
| Hexane, mix   | 601-007-00-7 | N/A              | Data not available or insufficient for classification | N/A      | N/A                            | N/A         |
| Non-Volatile Components   | Trade Secret | N/A              | Data not available or insufficient for classification | N/A      | N/A                            | N/A         |
| dimethyl ether  | 115-10-6     | Bacteria         | Experimental  | N/A      | EC10                           | >1,600 mg/l |
| dimethyl ether  | 115-10-6     | Guppy            | Experimental  | 96 hours | LC50                           | >4,100 mg/l |
| dimethyl ether  | 115-10-6     | Water flea       | Experimental  | 48 hours | EC50                           | >4,400 mg/l |
| cyclohexane   | 110-82-7     | Fathead minnow   | Experimental  | 96 hours | LC50                           | 4.53 mg/l   |
| cyclohexane   | 110-82-7     | Water flea       | Experimental  | 48 hours | EC50                           | 0.9 mg/l    |
| cyclohexane   | 110-82-7     | Bacteria         | Experimental  | 24 hours | IC50                           | 97 mg/l     |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane | 31393-98-3   | Water flea       | Experimental  | 48 hours | No tox obs at lmt of water sol | >100 mg/l   |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane | 31393-98-3   | Water flea       | Endpoint not reached                                  | 21 days  | EL10                           | >100 mg/l   |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane | 31393-98-3   | Activated sludge | Experimental  | 3 hours  | NOEC                           | 1,000 mg/l  |

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|  |              |                  |   |          |       |                              |
|--|--------------|------------------|---|----------|-------|------------------------------|
| Terpene Phenolic   | Trade Secret | N/A              | Data not available or insufficient for classification | N/A      | N/A   | N/A                          |
| isobutane  | 75-28-5      | N/A              | Data not available or insufficient for classification | N/A      | N/A   | N/A                          |
| propane  | 74-98-6      | N/A              | Data not available or insufficient for classification | N/A      | N/A   | N/A                          |
| ethanol  | 64-17-5      | Fathead minnow   | Experimental  | 96 hours | LC50  | 14,200 mg/l                  |
| ethanol  | 64-17-5      | Fish             | Experimental  | 96 hours | LC50  | 11,000 mg/l                  |
| ethanol  | 64-17-5      | Green algae      | Experimental  | 72 hours | EC50  | 275 mg/l                     |
| ethanol  | 64-17-5      | Water flea       | Experimental  | 48 hours | LC50  | 5,012 mg/l                   |
| ethanol  | 64-17-5      | Green algae      | Experimental  | 72 hours | ErC10 | 11.5 mg/l                    |
| ethanol  | 64-17-5      | Water flea       | Experimental  | 10 days  | NOEC  | 9.6 mg/l                     |
| pentane  | 109-66-0     | Green algae      | Experimental  | 72 hours | EC50  | 10.7 mg/l                    |
| pentane  | 109-66-0     | Rainbow trout    | Experimental  | 96 hours | LC50  | 4.26 mg/l                    |
| pentane  | 109-66-0     | Water flea       | Experimental  | 48 hours | EC50  | 2.7 mg/l                     |
| pentane  | 109-66-0     | Green algae      | Experimental  | 72 hours | NOEC  | 2.04 mg/l                    |
| n-hexane   | 110-54-3     | Fathead minnow   | Experimental  | 96 hours | LC50  | 2.5 mg/l                     |
| n-hexane   | 110-54-3     | Water flea       | Experimental  | 48 hours | LC50  | 3.9 mg/l                     |
| toluene  | 108-88-3     | Coho Salmon      | Experimental  | 96 hours | LC50  | 5.5 mg/l                     |
| toluene  | 108-88-3     | Grass Shrimp     | Experimental  | 96 hours | LC50  | 9.5 mg/l                     |
| toluene  | 108-88-3     | Green algae      | Experimental  | 72 hours | EC50  | 12.5 mg/l                    |
| toluene  | 108-88-3     | Leopard frog     | Experimental  | 9 days   | LC50  | 0.39 mg/l                    |
| toluene  | 108-88-3     | Pink Salmon      | Experimental  | 96 hours | LC50  | 6.41 mg/l                    |
| toluene  | 108-88-3     | Water flea       | Experimental  | 48 hours | EC50  | 3.78 mg/l                    |
| toluene  | 108-88-3     | Coho Salmon      | Experimental  | 40 days  | NOEC  | 1.39 mg/l                    |
| toluene  | 108-88-3     | Diatom           | Experimental  | 72 hours | NOEC  | 10 mg/l                      |
| toluene  | 108-88-3     | Water flea       | Experimental  | 7 days   | NOEC  | 0.74 mg/l                    |
| toluene  | 108-88-3     | Activated sludge | Experimental  | 12 hours | IC50  | 292 mg/l                     |
| toluene  | 108-88-3     | Bacteria         | Experimental  | 16 hours | NOEC  | 29 mg/l                      |
| toluene  | 108-88-3     | Bacteria         | Experimental  | 24 hours | EC50  | 84 mg/l                      |
| toluene  | 108-88-3     | Redworm          | Experimental  | 28 days  | LC50  | >150 mg per kg of bodyweight |
| toluene  | 108-88-3     | Soil microbes    | Experimental  | 28 days  | NOEC  | <26 mg/kg (Dry Weight)       |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4- | 1065336-91-5 | Green algae      | Experimental  | 72 hours | ErC50 | 1.68 mg/l                    |

**3M™ Super 77™ Cylinder Spray Adhesive (clear or red)**

|  |              |                  |              |          |       |            |
|--|--------------|------------------|--------------|----------|-------|------------|
| piperidyl sebacate   |              |                  |              |          |       |            |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 1065336-91-5 | Zebra Fish       | Experimental | 96 hours | LC50  | 0.9 mg/l   |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 1065336-91-5 | Green algae      | Experimental | 72 hours | ErC10 | 0.34 mg/l  |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 1065336-91-5 | Water flea       | Experimental | 21 days  | NOEC  | 1 mg/l     |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 1065336-91-5 | Activated sludge | Experimental | 3 hours  | IC50  | >=100 mg/l |

**12.2. Persistence and degradability**

| Material  | CAS Nbr      | Test type                         | Duration | Study Type                    | Test result       | Protocol                            |
|---|--------------|-----------------------------------|----------|-------------------------------|-------------------|-------------------------------------|
| Hexane, mix   | 601-007-00-7 | Data not available - insufficient | N/A      | N/A                           | N/A               | N/A                                 |
| Non-Volatile Components   | Trade Secret | Data not available - insufficient | N/A      | N/A                           | N/A               | N/A                                 |
| dimethyl ether  | 115-10-6     | Experimental Biodegradation       | 28 days  | BOD                           | 5 %BOD/ThOD       | OECD 301D - Closed bottle test      |
| dimethyl ether  | 115-10-6     | Experimental Photolysis           |          | Photolytic half-life (in air) | 12.4 days (t 1/2) |                                     |
| cyclohexane   | 110-82-7     | Experimental Biodegradation       | 28 days  | BOD                           | 77 %BOD/ThOD      | OECD 301F - Manometric respirometry |
| cyclohexane   | 110-82-7     | Experimental Photolysis           |          | Photolytic half-life (in air) | 4.3 days (t 1/2)  |                                     |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane | 31393-98-3   | Experimental Biodegradation       | 28 days  | BOD                           | 4 %BOD/ThOD       | OECD 301D - Closed bottle test      |
| Terpene Phenolic  | Trade Secret | Estimated Biodegradation          | 28 days  | BOD                           | 27.5 %BOD/ThOD    |                                     |
| isobutane   | 75-28-5      | Experimental Photolysis           |          | Photolytic half-life (in air) | 13.4 days (t 1/2) |                                     |
| propane   | 74-98-6      | Experimental Photolysis           |          | Photolytic half-life (in air) | 27.5 days (t 1/2) |                                     |
| ethanol   | 64-17-5      | Experimental Biodegradation       | 14 days  | BOD                           | 89 %BOD/ThOD      | OECD 301C - MITI test (I)           |
| pentane   | 109-66-0     | Experimental Biodegradation       | 28 days  | BOD                           | 87 %BOD/ThOD      | OECD 301F - Manometric respirometry |
| pentane   | 109-66-0     | Experimental Photolysis           |          | Photolytic half-life (in air) | 8.07 days (t 1/2) |                                     |
| n-hexane  | 110-54-3     | Experimental Bioconcentration     | 28 days  | BOD                           | 100 %BOD/ThOD     | OECD 301C - MITI test (I)           |

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|  |              |                             |         |                                |                    |                                |
|--|--------------|-----------------------------|---------|--------------------------------|--------------------|--------------------------------|
| n-hexane   | 110-54-3     | Experimental Photolysis     |         | Photolytic half-life (in air)  | 5.4 days (t 1/2)   |                                |
| toluene  | 108-88-3     | Experimental Biodegradation | 20 days | BOD                            | 80 %BOD/ThOD       | APHA Std Meth Water/Wastewater |
| toluene  | 108-88-3     | Experimental Photolysis     |         | Photolytic half-life (in air)  | 5.2 days (t 1/2)   |                                |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 1065336-91-5 | Experimental Biodegradation | 28 days | Dissolv. Organic Carbon Deplet | 38 %removal of DOC | OECD 301E - Modif. OECD Screen |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 1065336-91-5 | Experimental Hydrolysis     |         | Hydrolytic half-life (pH 7)    | 68 days (t 1/2)    | OECD 111 Hydrolysis func of pH |

**12.3 : Bioaccumulative potential**

| Material   | Cas No.      | Test type   | Duration | Study Type             | Test result | Protocol                        |
|--|--------------|---|----------|------------------------|-------------|---------------------------------|
| Hexane, mix  | 601-007-00-7 | Estimated Bioconcentration                            |          | Bioaccumulation factor | 150         |                                 |
| Non-Volatile Components  | Trade Secret | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                             |
| dimethyl ether   | 115-10-6     | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                             |
| cyclohexane  | 110-82-7     | Experimental BCF - Fish                               | 56 days  | Bioaccumulation factor | 129         | OECD305-Bioconcentration        |
| cyclohexane  | 110-82-7     | Experimental Bioconcentration                         |          | Log Kow                | 3.44        |                                 |
| 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane                    | 31393-98-3   | Experimental Bioconcentration                         |          | Log Kow                | >7.41       | EC A.8 Partition Coefficient    |
| Terpene Phenolic   | Trade Secret | Estimated Bioconcentration                            |          | Bioaccumulation factor | 18.9        |                                 |
| isobutane  | 75-28-5      | Experimental Bioconcentration                         |          | Log Kow                | 2.76        |                                 |
| propane  | 74-98-6      | Experimental Bioconcentration                         |          | Log Kow                | 2.36        |                                 |
| ethanol  | 64-17-5      | Experimental Bioconcentration                         |          | Log Kow                | -0.35       |                                 |
| pentane  | 109-66-0     | Estimated Bioconcentration                            |          | Bioaccumulation factor | 26          |                                 |
| n-hexane   | 110-54-3     | Modeled Bioconcentration                              |          | Bioaccumulation factor | 50          | Catalogic™                      |
| toluene  | 108-88-3     | Experimental BCF - Other                              | 72 hours | Bioaccumulation factor | 90          |                                 |
| toluene  | 108-88-3     | Experimental Bioconcentration                         |          | Log Kow                | 2.73        |                                 |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 1065336-91-5 | Analogous Compound BCF - Fish                         | 56 days  | Bioaccumulation factor | <31.4       |                                 |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 1065336-91-5 | Experimental Bioconcentration                         |          | Log Kow                | 2.77        | OECD 107 log Kow shke flask mtd |

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sebacate

**12.4. Mobility in soil**

| Material   | Cas No.      | Test type                     | Study Type | Test result | Protocol  |
|--|--------------|-------------------------------|------------|-------------|-----------|
| dimethyl ether   | 115-10-6     | Modeled Mobility in Soil      | Koc        | 3 l/kg      | Episuite™ |
| cyclohexane  | 110-82-7     | Modeled Mobility in Soil      | Koc        | 970 l/kg    | Episuite™ |
| pentane  | 109-66-0     | Estimated Mobility in Soil    | Koc        | 72 l/kg     | Episuite™ |
| toluene  | 108-88-3     | Experimental Mobility in Soil | Koc        | 37-160 l/kg |           |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 1065336-91-5 | Modeled Mobility in Soil      | Koc        | 7 l/kg      | Episuite™ |

**12.5. Results of the PBT and vPvB assessment**

This material does not contain any substances that are assessed to be a PBT or vPvB

**12.6. Endocrine disrupting properties**

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

**12.7. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

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

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

**EU waste code (product as sold)**

- 08 04 09\* Waste adhesives and sealants containing organic solvents or other dangerous substances
- 16 05 04\* Gases in pressure containers (including halons) containing dangerous substances

**EU waste code (product container after use)**

- 15 01 04 Metallic packaging

**SECTION 14: Transportation information**

|   | <b>Ground Transport (ADR)</b>   | <b>Air Transport (IATA)</b>   | <b>Marine Transport (IMDG)</b>   |
|---|---|---|--|
| <b>14.1 - UN Number or ID number</b>                              | UN3501  | UN3501  | UN3501   |
| <b>14.2 UN proper shipping name</b>                               | CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S.(DIMETHYL ETHER; CYCLOHEXANE) | CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S.(DIMETHYL ETHER; CYCLOHEXANE) | CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S.(DIMETHYL ETHER; CYCLOHEXANE; 2-METHYLPENTANE) |
| <b>14.3 Transport hazard class(es)</b>                            | 2.1   | 2.1   | 2.1  |
| <b>14.4 Packing group</b>   | No data available.  | No data available.  | No data available.   |
| <b>14.5 Environmental hazards</b>                                 | Environmentally Hazardous   | Not applicable.   | Marine Pollutant   |
| <b>14.6 Special precautions for user</b>                          | Please refer to the other sections of the SDS for further information.  | Please refer to the other sections of the SDS for further information.  | Please refer to the other sections of the SDS for further information.                   |
| <b>14.7 Marine Transport in bulk according to IMO instruments</b> | No data available.  | No data available.  | No data available.   |
| <b>Control Temperature</b>  | No data available.  | No data available.  | No data available.   |
| <b>Emergency Temperature</b>                                      | No data available.  | No data available.  | No data available.   |
| <b>ADR Classification Code</b>                                    | 8F  | Not applicable.   | Not applicable.  |
| <b>IMDG Segregation Code</b>                                      | Not applicable.   | Not applicable.   | NONE   |

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

## SECTION 15: Regulatory information

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

#### Carcinogenicity

##### Ingredient

toluene

##### CAS Nbr

108-88-3

##### Classification

Gr. 3: Not classifiable

##### Regulation

International Agency for Research on Cancer

#### Restrictions on the manufacture, placing on the market and use:

The following substance(s) contained in this product is/are subject through Annex XVII of REACH regulation to restrictions

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on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

| <u>Ingredient</u> | <u>CAS Nbr</u> |
|-------------------|----------------|
| cyclohexane       | 110-82-7       |
| toluene           | 108-88-3       |

Restriction status: listed in REACH Annex XVII

Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 for Conditions of Restriction

**Authorization status under REACH:**

The following substance/s contained in this product might be or is/are subject to authorization in accordance with REACH:

| <u>Ingredient</u> | <u>CAS Nbr</u> |
|-------------------|----------------|
| n-hexane          | 110-54-3       |

Authorization status: listed in the Candidate List of Substances of Very High Concern for Authorization

**Global inventory status**

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

**DIRECTIVE 2012/18/EU**

Seveso hazard categories, Annex 1, Part 1

| Hazard Categories                       | Qualifying quantity (tonnes) for the application of |                         |
|---|---|-------------------------|
|   | Lower-tier requirements                             | Upper-tier requirements |
| E2 Hazardous to the Aquatic environment | 200   | 500                     |

Seveso named dangerous substances, Annex 1, Part 2

None

**Regulation (EU) No 649/2012**

No chemicals listed

**15.2. Chemical Safety Assessment**

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

**SECTION 16: Other information****List of relevant H statements**

|        |   |
|--------|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| H220   | Extremely flammable gas.                              |

|       |  |
|-------|--|
| H225  | Highly flammable liquid and vapour.                                |
| H280  | Contains gas under pressure; may explode if heated.                |
| H304  | May be fatal if swallowed and enters airways.                      |
| H315  | Causes skin irritation.  |
| H317  | May cause an allergic skin reaction.                               |
| H319  | Causes serious eye irritation.                                     |
| H336  | May cause drowsiness or dizziness.                                 |
| H361d | Suspected of damaging the unborn child.                            |
| H361f | Suspected of damaging fertility.                                   |
| H372  | Causes damage to organs through prolonged or repeated exposure.    |
| H373  | May cause damage to organs through prolonged or repeated exposure. |
| H400  | Very toxic to aquatic life.  |
| H410  | Very toxic to aquatic life with long lasting effects.              |
| H411  | Toxic to aquatic life with long lasting effects.                   |
| H412  | Harmful to aquatic life with long lasting effects.                 |
| H413  | May cause long lasting harmful effects to aquatic life.            |

**List of Relevant Notas**

|        |  |
|--------|--|
| Nota C | Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.   |
| Nota U | When put on the market gases have to be classified as ‘Gases under pressure’, in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned: Press. Gas (Comp.) Press. Gas (Liq.) Press. Gas (Ref. Liq.) Press. Gas (Diss.) Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Nota 2). |

**Revision information:**

EU Section 14 - Table Data information was added.  
 EU Section 14 - Table Headers information was added.  
 Label: CLP Precautionary - Prevention information was modified.  
 Label: CLP Precautionary - Response information was added.  
 Label: CLP Precautionary - Storage information was deleted.  
 Label: Graphic information was modified.  
 Section 5: Hazardous combustion products table information was modified.  
 Section 9: Vapour pressure value information was modified.  
 Section 12: Component ecotoxicity information information was modified.  
 Section 12: Bioaccumulative potential information information was modified.  
 Section 14 Classification Code – Main Heading information was deleted.  
 Section 14 Classification Code – Regulation Data information was deleted.  
 Section 14 Control Temperature – Main Heading information was deleted.  
 Section 14 Control Temperature – Regulation Data information was deleted.  
 Section 14 Emergency Temperature – Main Heading information was deleted.  
 Section 14 Emergency Temperature – Regulation Data information was deleted.  
 Section 14 Hazard Class + Sub Risk – Main Heading information was deleted.  
 Section 14 Hazard Class + Sub Risk – Regulation Data information was deleted.  
 Section 14 Other Dangerous Goods – Main Heading information was deleted.  
 Section 14 Other Dangerous Goods – Regulation Data information was deleted.  
 Section 14 Packing Group – Main Heading information was deleted.  
 Section 14 Packing Group – Regulation Data information was deleted.  
 Section 14 Proper Shipping Name information was deleted.  
 Section 14 Regulations – Main Headings information was deleted.  
 Section 14 Segregation – Regulation Data information was deleted.

Section 14 Segregation Code – Main Heading information was deleted.

Section 14 Special Precautions – Main Heading information was deleted.

Section 14 Special Precautions – Regulation Data information was deleted.

Section 14 Transport in bulk – Regulation Data information was deleted.

Section 14 Marine transport in bulk according to IMO instruments – Main Heading information was deleted.

Section 14 UN Number Column data information was deleted.

Section 14 UN Number information was deleted.

Section 15: Authorization status under REACH: SVHC Authorization ingredient information information was added.

Section 16: Two-column table displaying the unique list of Notas for all components of the given material. information was added.

**DISCLAIMER:** The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

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