

# **Safety Data Sheet**

Copyright, 2017, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilising 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

| Document group:        | 27-7170-7                 | Version number:  | 7.04       |
|------------------------|---------------------------|------------------|------------|
| Revision date:         | 30/11/2017                | Supersedes date: | 22/09/2017 |
| Transportation version | number: 2.00 (09/08/2015) | _                |            |

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

**1.1. Product identifier**3M DisplayMount Spray Adhesive

#### **Product Identification Numbers** YP-2080-6067-0

7000116738

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

### Identified uses

Adhesive aerosol.

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

| Address:   | 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT. |
|------------|--|
| Telephone: | +44 (0)1344 858 000  |
| E Mail:    | tox.uk@mmm.com   |
| Website:   | www.3M.com/uk  |

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

# **SECTION 2: Hazard identification**

# 2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

#### **CLASSIFICATION:**

Aerosol, Category 1 - Aerosol 1; H222, H229 Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336 Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

#### 2.2. Label elements CLP REGULATION (EC) No 1272/2008

# SIGNAL WORD

DANGER.

**Symbols:** GHS02 (Flame) |GHS07 (Exclamation mark) |

#### Pictograms



| Ingredients:<br>Ingredient               | CAS Nbr   | EC No.    | % by Wt |
|--|-----------|-----------|---------|
| Acetone                                  | 67-64-1   | 200-662-2 | < 20    |
| Hydrocarbons, C7, n-alkanes, isoalkanes, | , cyclics | 927-510-4 | < 10    |
|  |           |           |         |

#### HAZARD STATEMENTS:

| H222 | Extremely flammable aerosol.                |
|------|---|
| H229 | Pressurised container. may burst if heated. |
| H319 | Causes serious eye irritation.              |
| H315 | Causes skin irritation.                     |
| H336 | May cause drowsiness or dizziness.          |
|      |   |

#### PRECAUTIONARY STATEMENTS

| <b>General:</b><br>P102              | Keep out of reach of children.  |
|--------------------------------------|---|
| Prevention:<br>P210A<br>P211<br>P251 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>Do not spray on an open flame or other ignition source.<br>Do not pierce or burn, even after use. |
| <b>Storage:</b><br>P410 + P412       | Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.  |
| Disposal:                            |   |
| P501                                 | Dispose of contents/container in accordance with applicable local/regional/national/international regulations.  |

11% of the mixture consists of components of unknown acute oral toxicity.

22% of the mixture consists of components of unknown acute dermal toxicity.

37% of the mixture consists of components of unknown acute inhalation toxicity.

Contains 25% of components with unknown hazards to the aquatic environment.

#### Notes on labelling

H304 is not required on the label because the product is an aerosol. Nota P applied to CAS # 64742-48-9, 64742-49-0, and 92045-53-9

#### 2.3. Other hazards

None known.

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

| Ingredient   | CAS Nbr         | EC No.    | REACH<br>Registration<br>No. | % by Wt | Classification  |
|--|-----------------|-----------|------------------------------|---------|---|
| Nonvolatile components   | Trade<br>Secret |           |                              | 20 - 30 | Substance not classified as hazardous   |
| Propane  | 74-98-6         | 200-827-9 | 01-<br>2119486944-<br>21     | 10 - 20 | Flam. Gas 1, H220; Liquified<br>gas, H280 - Nota U  |
| Acetone  | 67-64-1         | 200-662-2 | 01-<br>2119471330-<br>49     | < 20    | Flam. Liq. 2, H225; Eye Irrit.<br>2, H319; STOT SE 3, H336;<br>EUH066   |
| Butadiene-styrene-meta-<br>divinylbenzene polymer                  | 26471-45-4      |           |                              | 7 - 13  | Substance not classified as hazardous   |
| Dimethyl Ether   | 115-10-6        | 204-065-8 |                              | 7 - 13  | Flam. Gas 1, H220; Liquified<br>gas, H280 - Nota U  |
| Resin acids and Rosin acids,<br>hydrogenated, esters with glycerol | 65997-13-9      | 266-042-9 | 01-<br>2119487112-<br>43     | 1 - 10  | Substance with a Community<br>level exposure limit in the<br>workplace  |
| Hydrocarbons, C7, n-alkanes,<br>isoalkanes, cyclics                |                 | 927-510-4 | 01-<br>2119475515-<br>33     | < 10    | Flam. Liq. 2, H225; Asp.<br>Tox. 1, H304; Skin Irrit. 2,<br>H315; STOT SE 3, H336;<br>Aquatic Chronic 2, H411 |
| Hydrocarbons, C6, isoalkanes, < 5% n-<br>Hexane                    |                 | 931-254-9 | 01-<br>2119484651-<br>34     | 1 - 7   | Flam. Liq. 2, H225; Asp.<br>Tox. 1, H304; Skin Irrit. 2,<br>H315; STOT SE 3, H336;<br>Aquatic Chronic 2, H411 |
| Pentane  | 109-66-0        | 203-692-4 |                              | 3 - 7   | Flam. Liq. 2, H225; Asp.<br>Tox. 1, H304; STOT SE 3,<br>H336; EUH066; Aquatic<br>Chronic 2, H411 - Nota C     |
| Butane   | 106-97-8        | 203-448-7 | 01-<br>2119474691-<br>32     | 3 - 7   | Flam. Gas 1, H220; Liquified<br>gas, H280 - Nota C,U  |
| Isobutane  | 75-28-5         | 200-857-2 | 01-<br>2119485395-<br>27     | 1 - 5   | Flam. Gas 1, H220; Liquified<br>gas, H280 - Nota C,U  |
| Naphtha (petroleum), hydrotreated<br>heavy                         | 64742-48-9      | 265-150-3 |                              | 1 - 3   | Asp. Tox. 1, H304 - Nota P<br>Aquatic Chronic 2, H411<br>Skin Irrit. 2, H315; STOT SE<br>3, H336              |
| Limestone  | 1317-65-3       | 215-279-6 |                              | < 2     | Substance with a Community<br>level exposure limit in the<br>workplace  |
| 2-methylbutane   | 78-78-4         | 201-142-8 |                              | 0.5 - 2 | Flam. Liq. 1, H224; Asp.<br>Tox. 1, H304; STOT SE 3,  |

|                   |          |           |              | H336; EUH066; Aquatic<br>Chronic 2, H411   |
|-------------------|----------|-----------|--------------|--|
| Methylcyclohexane | 108-87-2 | 203-624-3 | 0.5 -<br>1.5 | Flam. Liq. 2, H225; Asp.<br>Tox. 1, H304; Skin Irrit. 2,<br>H315; STOT SE 3, H336;<br>Aquatic Chronic 2, H411  |
| Cyclopentane      | 287-92-3 | 206-016-6 | 0.5 -<br>1.5 | Flam. Liq. 2, H225; Aquatic<br>Chronic 3, H412   |
| n-hexane          | 110-54-3 | 203-777-6 | 0.1 - 1      | Flam. Liq. 2, H225; Asp.<br>Tox. 1, H304; Skin Irrit. 2,<br>H315; Repr. 2, H361f; STOT<br>SE 3, H336; STOT RE 2,<br>H373; Aquatic Chronic 2,<br>H411 |

Note: Any entry in the EC# 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

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

See Section 11.1 Information on toxicological effects

#### 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

Use a fire fighting agent suitable for the surrounding fire.

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

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

# Hazardous Decomposition or By-Products

**Substance** 

#### **Condition**

Aldehydes.During combustion.Hydrocarbons.During combustion.FormaldehydeDuring 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.

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

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

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

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

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

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. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Dispose of collected material 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

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. 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. 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

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Protect from sunlight. Store in a well-ventilated place. 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    |
|--|-----------------|--------------|--|------------------------|
| Butane   | 106-97-8        | UK HSC       | TWA:1450 mg/m <sup>3</sup> (600        |                        |
|  |                 |              | ppm);STEL:1810 mg/m3(750               |                        |
|  |                 |              | ppm)                                   |                        |
| Pentane  | 109-66-0        | UK HSC       | TWA:1800 mg/m <sup>3</sup> (600 ppm)   |                        |
| n-hexane   | 110-54-3        | UK HSC       | TWA:72 mg/m3(20 ppm)                   |                        |
| Dimethyl Ether   | 115-10-6        | UK HSC       | TWA:766 mg/m <sup>3</sup> (400         |                        |
|  |                 |              | ppm);STEL:958 mg/m3(500                |                        |
|  |                 |              | ppm)                                   |                        |
| Limestone  | 1317-65-3       | UK HSC       | TWA(as inhalable dust):10              |                        |
|  |                 |              | mg/m3;TWA(as respirable                |                        |
|  |                 |              | dust):4                                |                        |
|  |                 |              | mg/m3;TWA(Inhalable):10                |                        |
|  |                 |              | mg/m3;TWA(respirable):4                |                        |
|  |                 |              | mg/m3                                  |                        |
| Naphtha (petroleum),   | 64742-48-9      | Manufacturer | TWA:100 ppm                            |                        |
| hydrotreated heavy   |                 | determined   |  |                        |
| Rosin  | 65997-13-9      | UK HSC       | TWA(as fume):0.05                      | Respiratory Sensitizer |
|  |                 |              | mg/m <sup>3</sup> ;STEL(as fume):0.15  |                        |
|  | ( <b>-</b> () ) |              | mg/m <sup>3</sup>                      |                        |
| Acetone  | 67-64-1         | UK HSC       | TWA:1210 mg/m <sup>3</sup> (500        |                        |
|  |                 |              | ppm);STEL:3620 mg/m <sup>3</sup> (1500 |                        |
| D  | 74.00 (         |              | ppm)                                   | 1 • /                  |
| Propane  | 74-98-6         | UK HSC       | Limit value not established:           | asphyxiant             |
| 2-methylbutane   | . 78-78-4       | UK HSC       | TWA:1800 mg/m <sup>3</sup> (600 ppm)   |                        |
| UK HSC : UK Health and Safety Commis<br>TWA: Time-Weighted-Average | sion            |              |  |                        |
| STEL: Short Term Exposure Limit                                    |                 |              |  |                        |
| 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.

#### Derived no effect level (DNEL)

| Ingredient  | Degradation<br>Product | Population | Human exposure<br>pattern  | DNEL                    |
|---|------------------------|------------|--|-------------------------|
| Hydrocarbons, C6,<br>isoalkanes, < 5% n-<br>Hexane      |                        | Worker     | Dermal, Long-term<br>exposure (8 hours),<br>Systemic effects     | 13,964 mg/kg bw/d       |
| Hydrocarbons, C6,<br>isoalkanes, < 5% n-<br>Hexane      |                        | Worker     | Inhalation, Long-term<br>exposure (8 hours),<br>Systemic effects | 5,306 mg/m <sup>3</sup> |
| Hydrocarbons, C7, n-<br>alkanes, isoalkanes,<br>cyclics |                        | Worker     | Dermal, Long-term<br>exposure (8 hours),<br>Systemic effects     | 300 mg/kg bw/d          |
| Hydrocarbons, C7, n-<br>alkanes, isoalkanes,<br>cyclics |                        | Worker     | Inhalation, Long-term<br>exposure (8 hours),<br>Systemic effects | 2,085 mg/m <sup>3</sup> |

#### Predicted no effect concentrations (PNEC)

| Ingredient                   | Degradation | Compartment            | PNEC            |
|------------------------------|-------------|------------------------|-----------------|
|                              | Product     |                        |                 |
| Hydrocarbons, C7, n-         |             | Agricultural soil      | 0.53 mg/kg d.w. |
| alkanes, isoalkanes, cyclics |             |                        |                 |
| Hydrocarbons, C7, n-         |             | Freshwater             | 0.096 mg/l      |
| alkanes, isoalkanes, cyclics |             |                        | _               |
| Hydrocarbons, C7, n-         |             | Freshwater sediments   | 2.5 mg/kg d.w.  |
| alkanes, isoalkanes, cyclics |             |                        |                 |
| Hydrocarbons, C7, n-         |             | Marine water           | 0.096 mg/l      |
| alkanes, isoalkanes, cyclics |             |                        |                 |
| Hydrocarbons, C7, n-         |             | Marine water sediments | 2.5 mg/kg d.w.  |
| alkanes, isoalkanes, cyclics |             |                        |                 |

#### **8.2.** Exposure controls

In addition, refer to the annex for more information.

#### 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: Indirect vented goggles.

*Applicable Norms/Standards* Use eye protection conforming to EN 166

#### 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:

MaterialThicknessPolymer laminateNo data ar

Thickness (mm) No data available **Breakthrough Time** No data available

Applicable Norms/Standards Use gloves tested to EN 374

#### **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 supplied-air respirator

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

#### 8.2.3. Environmental exposure controls

Refer to Annex

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

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

| Physical state                         | Liquid.  |
|--|--|
| Specific Physical Form:                | Aerosol  |
| Appearance/Odour                       | Transparent - white liquid in aerosol, strong ketone odour |
| Odour threshold                        | No data available.   |
| рН                                     | Not applicable.  |
| <b>Boiling point/boiling range</b>     | Not applicable.  |
| Melting point                          | Not applicable.  |
| Flammability (solid, gas)              | Not applicable.  |
| Explosive properties                   | Not classified   |
| Oxidising properties                   | Not classified   |
| Flash point                            | -42 °C   |
| Autoignition temperature               | No data available.   |
| Flammable Limits(LEL)                  | No data available.   |
| Flammable Limits(UEL)                  | No data available.   |
| Vapour pressure                        | No data available.   |
| Relative density                       | 0.74 [ <i>Ref Std</i> :WATER=1]                            |
| Water solubility                       | Nil  |
| Solubility- non-water                  | No data available.   |
| Partition coefficient: n-octanol/water | No data available.   |
| Evaporation rate                       | No data available.   |
| Vapour density                         | >=1 [ <i>Ref Std</i> :AIR=1]                               |
| Decomposition temperature              | No data available.   |
| Viscosity                              | Not applicable.  |
| Density                                | 0.74 g/ml  |
| 9.2. Other information                 |  |
| EU Volatile Organic Compounds          | No data available.   |
| Percent volatile                       | 75 % weight  |

# **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**

Sparks and/or flames. Heat.

**10.5 Incompatible materials** None known.

# 10.6 Hazardous decomposition products Substance

None known.

**Condition** 

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

The information below may not 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 3M assessments.

**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

Intentional concentration and inhalation may be harmful or fatal. 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

Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain.

#### 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 sensitisation: 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.

#### **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>Vapour(4<br>hr)        |                  | No data available; calculated ATE >50 mg/l     |
| Overall product   | Ingestion                             |                  | No data available; calculated ATE >5,000 mg/kg |
| Acetone   | Dermal                                | Rabbit           | LD50 > 15,688 mg/kg                            |
| Acetone   | Inhalation-<br>Vapour (4<br>hours)    | Rat              | LC50 76 mg/l                                   |
| Acetone   | Ingestion                             | Rat              | LD50 5,800 mg/kg                               |
| Propane   | Inhalation-<br>Gas (4<br>hours)       | Rat              | LC50 > 200,000 ppm                             |
| Dimethyl Ether  | Inhalation-<br>Gas (4<br>hours)       | Rat              | LC50 164,000 ppm                               |
| Butadiene-styrene-meta-divinylbenzene polymer                   | Dermal                                |                  | LD50 estimated to be > 5,000 mg/kg             |
| Butadiene-styrene-meta-divinylbenzene polymer                   | Ingestion                             |                  | LD50 estimated to be 2,000 - 5,000 mg/kg       |
| Nonvolatile components  | Dermal                                |                  | LD50 estimated to be > 5,000 mg/kg             |
| Nonvolatile components  | Ingestion                             | Rat              | LD50 > 34,000 mg/kg                            |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics                | Inhalation-<br>Vapour (4<br>hours)    | Not<br>available | LC50 > 20 mg/l                                 |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics                | Dermal                                | Rabbit           | LD50 > 2,000 mg/kg                             |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics                | Ingestion                             | Rat              | LD50 > 5,000 mg/kg                             |
| Pentane   | Dermal                                | Rabbit           | LD50 3,000 mg/kg                               |
| Pentane   | Inhalation-<br>Vapour (4<br>hours)    | Rat              | LC50 > 18 mg/l                                 |
| Pentane   | Ingestion                             | Rat              | LD50 > 2,000 mg/kg                             |
| Butane  | Inhalation-<br>Gas (4<br>hours)       | Rat              | LC50 277,000 ppm                               |
| Resin acids and Rosin acids, hydrogenated, esters with glycerol | Dermal                                | Rat              | LD50 > 2,000 mg/kg                             |
| Resin acids and Rosin acids, hydrogenated, esters with glycerol | Ingestion                             | Rat              | LD50 > 2,000 mg/kg                             |
| Isobutane   | Inhalation-<br>Gas (4<br>hours)       | Rat              | LC50 276,000 ppm                               |
| Hydrocarbons, C6, isoalkanes, < 5% n- Hexane                    | Dermal                                |                  | LD50 > 5,000 mg/kg                             |
| Hydrocarbons, C6, isoalkanes, < 5% n- Hexane                    | Inhalation-<br>Vapour (4<br>hours)    | Rat              | LC50 > 20 mg/l                                 |
| Hydrocarbons, C6, isoalkanes, < 5% n- Hexane                    | Ingestion                             | Rat              | LD50 > 5,000 mg/kg                             |
| 2-methylbutane  | Dermal                                | Rabbit           | LD50 3,000 mg/kg                               |
| 2-methylbutane  | Inhalation-<br>Vapour (4<br>hours)    | Rat              | LC50 > 18 mg/l                                 |
| 2-methylbutane  | Ingestion                             | Rat              | LD50 > 2,000 mg/kg                             |
| Naphtha (petroleum), hydrotreated heavy                         | Inhalation-<br>Vapour                 |                  | LC50 estimated to be 20 - 50 mg/l              |
| Naphtha (petroleum), hydrotreated heavy                         | Dermal                                | Rabbit           | LD50 > 3,000 mg/kg                             |
| Naphtha (petroleum), hydrotreated heavy<br>Methylcyclohexane    | Ingestion<br>Inhalation-              | Rat<br>Mouse     | LD50 > 5,000 mg/kg<br>LC50 26 mg/l             |
|   | Vapour (4<br>hours)                   |                  |  |
| Methylcyclohexane   | Dermal                                | Rabbit           | LD50 > 86,700 mg/kg                            |
| Methylcyclohexane   | Ingestion                             | Rat              | LD50 > 3,200 mg/kg                             |
| Limestone   | Dermal                                | Rat              | LD50 > 2,000  mg/kg                            |
| Limestone   | Inhalation-<br>Dust/Mist<br>(4 hours) | Rat              | LC50 3 mg/l                                    |

| Limestone    | Ingestion                          | Rat    | LD50 6,450 mg/kg                   |
|--------------|------------------------------------|--------|------------------------------------|
| Cyclopentane | Dermal                             |        | LD50 estimated to be > 5,000 mg/kg |
| Cyclopentane | Inhalation-<br>Vapour (4<br>hours) | Rat    | LC50 > 25.3 mg/l                   |
| Cyclopentane | Ingestion                          | Rat    | LD50 > 5,000 mg/kg                 |
| n-hexane     | Dermal                             | Rabbit | LD50 > 2,000 mg/kg                 |
| n-hexane     | Inhalation-<br>Vapour (4<br>hours) | Rat    | LC50 170 mg/l                      |
| n-hexane     | Ingestion                          | Rat    | LD50 > 28,700 mg/kg                |

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

| Name  | Species   | Value                     |
|---|-----------|---------------------------|
| Acetone   | Mouse     | Minimal irritation        |
| Propane   | Rabbit    | Minimal irritation        |
| Butadiene-styrene-meta-divinylbenzene polymer                   | Professio | Minimal irritation        |
| Butadiene-styrene-meta-drvinyibenzene porymer                   | nal       |                           |
|   | judgemen  |                           |
|   | t         |                           |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics                | Professio | Irritant                  |
|   | nal       |                           |
|   | judgemen  |                           |
|   | t         |                           |
| Pentane   | Rabbit    | Minimal irritation        |
| Butane  | Professio | No significant irritation |
|   | nal       |                           |
|   | judgemen  |                           |
|   | t         |                           |
| Resin acids and Rosin acids, hydrogenated, esters with glycerol | Rabbit    | No significant irritation |
| Isobutane   | Professio | No significant irritation |
|   | nal       |                           |
|   | judgemen  |                           |
| Understehens C( incellence < 50/ m Unerste                      | t<br>Not  | Irritant                  |
| Hydrocarbons, C6, isoalkanes, < 5% n- Hexane                    | available | Irritant                  |
| 2-methylbutane  | Rabbit    | Minimal irritation        |
| Naphtha (petroleum), hydrotreated heavy                         | Rabbit    | Irritant                  |
| Methylcyclohexane   | Rabbit    | Minimal irritation        |
| Limestone   | Rabbit    | No significant irritation |
|   | Rabbit    | Minimal irritation        |
| Cyclopentane<br>n-hexane  | Human     | Minimal irritation        |
| п-пехапе  | and       | wind initialit            |
|   | animal    |                           |
|   | annal     |                           |

### Serious Eye Damage/Irritation

| Name  | Species   | Value                     |
|---|-----------|---------------------------|
|   |           |                           |
| Acetone   | Rabbit    | Severe irritant           |
| Propane   | Rabbit    | Mild irritant             |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics                | Professio | No significant irritation |
|   | nal       |                           |
|   | judgemen  |                           |
|   | t         |                           |
| Pentane   | Rabbit    | Mild irritant             |
| Butane  | Rabbit    | No significant irritation |
| Resin acids and Rosin acids, hydrogenated, esters with glycerol | Rabbit    | Mild irritant             |
| Isobutane   | Professio | No significant irritation |
|   | nal       |                           |
|   | judgemen  |                           |
|   | t         |                           |
| 2-methylbutane  | Rabbit    | Mild irritant             |
| Naphtha (petroleum), hydrotreated heavy                         | Rabbit    | No significant irritation |

| Methylcyclohexane | Rabbit | Mild irritant             |
|-------------------|--------|---------------------------|
| Limestone         | Rabbit | No significant irritation |
| Cyclopentane      | Rabbit | Mild irritant             |
| n-hexane          | Rabbit | Mild irritant             |

#### **Skin Sensitisation**

| Name  | Species                | Value          |
|---|------------------------|----------------|
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics                | Not<br>available       | Not classified |
| Pentane   | Guinea<br>pig          | Not classified |
| Resin acids and Rosin acids, hydrogenated, esters with glycerol | Human<br>and<br>animal | Not classified |
| 2-methylbutane  | Guinea<br>pig          | Not classified |
| Naphtha (petroleum), hydrotreated heavy                         | Guinea                 | Not classified |
| n-hexane  | Human                  | Not classified |

### **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  |
|---|----------|--|
| Acetone                                 | In vivo  | Not mutagenic  |
| Acetone                                 | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Propane                                 | In Vitro | Not mutagenic  |
| Dimethyl Ether                          | In Vitro | Not mutagenic  |
| Dimethyl Ether                          | In vivo  | Not mutagenic  |
| Pentane                                 | In vivo  | Not mutagenic  |
| Pentane                                 | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Butane                                  | In Vitro | Not mutagenic  |
| Isobutane                               | In Vitro | Not mutagenic  |
| 2-methylbutane                          | In vivo  | Not mutagenic  |
| 2-methylbutane                          | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Naphtha (petroleum), hydrotreated heavy | In vivo  | Not mutagenic  |
| Naphtha (petroleum), hydrotreated heavy | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| n-hexane                                | In Vitro | Not mutagenic  |
| n-hexane                                | In vivo  | Not mutagenic  |

#### Carcinogenicity

| Name                                    | Route      | Species  | Value  |
|---|------------|----------|--|
| Acetone                                 | Not        | Multiple | Not carcinogenic                               |
|   | specified. | animal   |  |
|   |            | species  |  |
| Dimethyl Ether                          | Inhalation | Rat      | Not carcinogenic                               |
| Naphtha (petroleum), hydrotreated heavy | Dermal     | Mouse    | Some positive data exist, but the data are not |
|   |            |          | sufficient for classification                  |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | Human    | Some positive data exist, but the data are not |
|   |            | and      | sufficient for classification                  |
|   |            | animal   |  |
| Methylcyclohexane                       | Inhalation | Multiple | Not carcinogenic                               |
|   |            | animal   |  |
|   |            | species  |  |
| n-hexane                                | Dermal     | Mouse    | Not carcinogenic                               |
| n-hexane                                | 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<br>Duration               |
|---|------------|--------------------------------------|---------|-----------------------------|------------------------------------|
| Acetone                                 | Ingestion  | Not classified for male reproduction | Rat     | NOAEL<br>1,700<br>mg/kg/day | 13 weeks                           |
| Acetone                                 | Inhalation | Not classified for development       | Rat     | NOAEL 5.2<br>mg/l           | during<br>organogenesis            |
| Dimethyl Ether                          | Inhalation | Not classified for development       | Rat     | NOAEL<br>40,000 ppm         | during<br>organogenesis            |
| Pentane                                 | Ingestion  | Not classified for development       | Rat     | NOAEL<br>1,000<br>mg/kg/day | during<br>organogenesis            |
| Pentane                                 | Inhalation | Not classified for development       | Rat     | NOAEL 30<br>mg/l            | during<br>organogenesis            |
| 2-methylbutane                          | Ingestion  | Not classified for development       | Rat     | NOAEL<br>1,000<br>mg/kg/day | during<br>organogenesis            |
| 2-methylbutane                          | Inhalation | Not classified for development       | Rat     | NOAEL 30<br>mg/l            | during<br>organogenesis            |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | Not classified for development       | Rat     | NOAEL 2.4<br>mg/l           | during<br>organogenesis            |
| Limestone                               | Ingestion  | Not classified for development       | Rat     | NOAEL 625<br>mg/kg/day      | premating &<br>during<br>gestation |
| n-hexane                                | Ingestion  | Not classified for development       | Mouse   | NOAEL<br>2,200<br>mg/kg/day | during<br>organogenesis            |
| n-hexane                                | Inhalation | Not classified for development       | Rat     | NOAEL 0.7<br>mg/l           | during gestation                   |
| n-hexane                                | Ingestion  | Toxic to male reproduction           | Rat     | NOAEL<br>1,140<br>mg/kg/day | 90 days                            |
| n-hexane                                | Inhalation | Toxic to male reproduction           | Rat     | LOAEL 3.52<br>mg/l          | 28 days                            |

### Target Organ(s)

# Specific Target Organ Toxicity - single exposure

| Name           | Route      | Target Organ(s)                      | Value  | Species       | Test result            | Exposure<br>Duration      |
|----------------|------------|--------------------------------------|--|---------------|------------------------|---------------------------|
| Acetone        | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Human         | NOAEL Not<br>available |                           |
| Acetone        | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | Human         | NOAEL Not<br>available |                           |
| Acetone        | Inhalation | immune system                        | Not classified   | Human         | NOAEL 1.19<br>mg/l     | 6 hours                   |
| Acetone        | Inhalation | liver                                | Not classified   | Guinea<br>pig | NOAEL Not<br>available |                           |
| Acetone        | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  | Human         | NOAEL Not<br>available | poisoning<br>and/or abuse |
| Propane        | Inhalation | cardiac sensitisation                | Causes damage to organs  | Human         | NOAEL Not<br>available |                           |
| Propane        | Inhalation | central nervous<br>system depression | May cause drowsiness or<br>dizziness   | Human         | NOAEL Not<br>available |                           |
| Propane        | Inhalation | respiratory irritation               | Not classified   | Human         | NOAEL Not<br>available |                           |
| Dimethyl Ether | Inhalation | central nervous<br>system depression | May cause drowsiness or<br>dizziness   | Rat           | LOAEL<br>10,000 ppm    | 30 minutes                |
| Dimethyl Ether | Inhalation | cardiac sensitisation                | Some positive data exist, but the data are not sufficient for classification | Dog           | NOAEL<br>100,000 ppm   | 5 minutes                 |

| Hydrocarbons, C7, n-         | Inhalation | central nervous                      | May cause drowsiness or                                       | Professio      | NOAEL Not              |               |
|------------------------------|------------|--------------------------------------|---|----------------|------------------------|---------------|
| alkanes, isoalkanes, cyclics | minutation | system depression                    | dizziness   | nal            | available              |               |
| · · · ·                      |            | , I                                  |   | judgeme        |                        |               |
|                              |            |                                      |   | nt             |                        |               |
| Hydrocarbons, C7, n-         | Ingestion  | central nervous                      | May cause drowsiness or                                       | Professio      | NOAEL Not              |               |
| alkanes, isoalkanes, cyclics |            | system depression                    | dizziness   | nal            | available              |               |
|                              |            |                                      |   | judgeme        |                        |               |
| Pentane                      | Inhalation | central nervous                      | May agusa drawsingss or                                       | nt<br>Multiple | NOAEL Not              | not available |
| Pentane                      | Innatation | system depression                    | May cause drowsiness or<br>dizziness                          | animal         | available              | not available |
|                              |            | system depression                    | uizziiess   | species        | available              |               |
| Pentane                      | Inhalation | respiratory irritation               | Some positive data exist, but the                             | Not            | NOAEL Not              | not available |
|                              |            |                                      | data are not sufficient for                                   | available      | available              |               |
|                              |            |                                      | classification  |                |                        |               |
| Pentane                      | Inhalation | cardiac sensitisation                | Not classified  | Dog            | NOAEL Not              | not available |
|                              |            |                                      |   |                | available              |               |
| Pentane                      | Ingestion  | central nervous                      | May cause drowsiness or                                       | Professio      | NOAEL Not              | not available |
|                              |            | system depression                    | dizziness   | nal            | available              |               |
|                              |            |                                      |   | judgeme        |                        |               |
| Butane                       | Inhalation | cardiac sensitisation                | Causas damaga ta argana                                       | nt             | NOAEL Not              |               |
| Dutalle                      | matation   | carutae sensitisation                | Causes damage to organs                                       | Human          | available              |               |
| Butane                       | Inhalation | central nervous                      | May cause drowsiness or                                       | Human          | NOAEL Not              |               |
| 2 www.iv                     | muluion    | system depression                    | dizziness   | and            | available              |               |
|                              |            | ogotom depression                    |   | animal         | u vulluoite            |               |
| Butane                       | Inhalation | heart                                | Not classified  | Dog            | NOAEL                  | 25 minutes    |
|                              |            |                                      |   | -              | 5,000 ppm              |               |
| Butane                       | Inhalation | respiratory irritation               | Not classified  | Rabbit         | NOAEL Not              |               |
|                              |            |                                      |   |                | available              |               |
| Isobutane                    | Inhalation | cardiac sensitisation                | Causes damage to organs                                       | Multiple       | NOAEL Not              |               |
|                              |            |                                      |   | animal         | available              |               |
| <b>X</b> 1 .                 | X 1 1 2    | . 1                                  |   | species        | NOATING                |               |
| Isobutane                    | Inhalation | central nervous<br>system depression | May cause drowsiness or<br>dizziness                          | Human<br>and   | NOAEL Not<br>available |               |
|                              |            | system depression                    | dizziliess  | animal         | available              |               |
| Isobutane                    | Inhalation | respiratory irritation               | Not classified  | Mouse          | NOAEL Not              |               |
| loooutune                    | initiation | respiratory initiation               |   | mouse          | available              |               |
| Hydrocarbons, C6,            | Inhalation | central nervous                      | May cause drowsiness or                                       |                | NOAEL Not              |               |
| isoalkanes, < 5% n-          |            | system depression                    | dizziness   |                | available              |               |
| Hexane                       |            |                                      |   |                |                        |               |
| 2-methylbutane               | Inhalation | central nervous                      | May cause drowsiness or                                       | Multiple       | NOAEL Not              | not available |
|                              |            | system depression                    | dizziness   | animal         | available              |               |
| <b>A</b>                     |            |                                      |   | species        |                        |               |
| 2-methylbutane               | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for | Not            | NOAEL Not              | not available |
|                              |            |                                      | classification  | available      | available              |               |
| 2-methylbutane               | Inhalation | cardiac sensitisation                | Not classified  | Dog            | NOAEL Not              | not available |
| 2-methyloutane               | matation   | carciac sensitisation                | Not classified  | Dog            | available              |               |
| 2-methylbutane               | Ingestion  | central nervous                      | May cause drowsiness or                                       | Professio      | NOAEL Not              | not available |
| =                            | 8          | system depression                    | dizziness   | nal            | available              |               |
|                              |            | 5 1                                  |   | judgeme        |                        |               |
|                              |            |                                      |   | nt             |                        |               |
| Naphtha (petroleum),         | Inhalation | central nervous                      | May cause drowsiness or                                       | Human          | NOAEL Not              |               |
| hydrotreated heavy           |            | system depression                    | dizziness   | and            | available              |               |
|                              | X 1 1 2    | ·                                    |   | animal         | NOAFYN                 |               |
| Naphtha (petroleum),         | Inhalation | respiratory irritation               | Some positive data exist, but the                             |                | NOAEL Not              |               |
| hydrotreated heavy           |            |                                      | data are not sufficient for<br>classification                 |                | available              |               |
| Naphtha (petroleum),         | Inhalation | nervous system                       | Not classified  | Dog            | NOAEL 6.5              | 4 hours       |
| hydrotreated heavy           | matation   | nervous system                       |   | Dog            | mg/l                   |               |
| Naphtha (petroleum),         | Ingestion  | central nervous                      | May cause drowsiness or                                       | Professio      | NOAEL Not              | 1             |
| hydrotreated heavy           |            | system depression                    | dizziness   | nal            | available              |               |
| JJ                           |            | r                                    |   | judgeme        |                        |               |
|                              |            |                                      |   | nt             |                        |               |
| Methylcyclohexane            | Inhalation | central nervous                      | May cause drowsiness or                                       | Multiple       | NOAEL Not              |               |
|                              |            | system depression                    | dizziness   | animal         | available              |               |
|                              |            |                                      |   | species        |                        |               |
| Methylcyclohexane            | Inhalation | respiratory irritation               | Some positive data exist, but the                             | Human          | NOAEL Not              | occupational  |

|                   |            |                                      | data are not sufficient for<br>classification                                |                                   | available              | exposure      |
|-------------------|------------|--------------------------------------|--|-----------------------------------|------------------------|---------------|
| Methylcyclohexane | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  | Professio<br>nal<br>judgeme<br>nt | NOAEL Not<br>available |               |
| Limestone         | Inhalation | respiratory system                   | Not classified   | Rat                               | NOAEL<br>0.812 mg/l    | 90 minutes    |
| Cyclopentane      | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | similar<br>compoun<br>ds          | NOAEL Not<br>available |               |
| Cyclopentane      | Ingestion  | central nervous<br>system depression | May cause drowsiness or<br>dizziness   | Professio<br>nal<br>judgeme<br>nt | NOAEL Not<br>available |               |
| n-hexane          | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Human                             | NOAEL Not<br>available | not available |
| n-hexane          | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | Rabbit                            | NOAEL Not<br>available | 8 hours       |
| n-hexane          | Inhalation | respiratory system                   | Not classified   | Rat                               | NOAEL 24.6<br>mg/l     | 8 hours       |

# Specific Target Organ Toxicity - repeated exposure

| Name           | Route      | Target Organ(s)  | Value          | Species       | Test result                  | Exposure<br>Duration  |
|----------------|------------|--|----------------|---------------|------------------------------|-----------------------|
| Acetone        | Dermal     | eyes   | Not classified | Guinea<br>pig | NOAEL Not<br>available       | 3 weeks               |
| Acetone        | Inhalation | hematopoietic<br>system  | Not classified | Human         | NOAEL 3<br>mg/l              | 6 weeks               |
| Acetone        | Inhalation | immune system  | Not classified | Human         | NOAEL 1.19<br>mg/l           | 6 days                |
| Acetone        | Inhalation | kidney and/or<br>bladder   | Not classified | Guinea<br>pig | NOAEL 119<br>mg/l            | not available         |
| Acetone        | Inhalation | heart   liver  | Not classified | Rat           | NOAEL 45<br>mg/l             | 8 weeks               |
| Acetone        | Ingestion  | kidney and/or<br>bladder   | Not classified | Rat           | NOAEL 900<br>mg/kg/day       | 13 weeks              |
| Acetone        | Ingestion  | heart  | Not classified | Rat           | NOAEL<br>2,500<br>mg/kg/day  | 13 weeks              |
| Acetone        | Ingestion  | hematopoietic<br>system  | Not classified | Rat           | NOAEL 200<br>mg/kg/day       | 13 weeks              |
| Acetone        | Ingestion  | liver  | Not classified | Mouse         | NOAEL<br>3,896<br>mg/kg/day  | 14 days               |
| Acetone        | Ingestion  | eyes   | Not classified | Rat           | NOAEL<br>3,400<br>mg/kg/day  | 13 weeks              |
| Acetone        | Ingestion  | respiratory system   | Not classified | Rat           | NOAEL<br>2,500<br>mg/kg/day  | 13 weeks              |
| Acetone        | Ingestion  | muscles  | Not classified | Rat           | NOAEL<br>2,500 mg/kg         | 13 weeks              |
| Acetone        | Ingestion  | skin   bone, teeth,<br>nails, and/or hair                                  | Not classified | Mouse         | NOAEL<br>11,298<br>mg/kg/day | 13 weeks              |
| Dimethyl Ether | Inhalation | hematopoietic<br>system  | Not classified | Rat           | NOAEL<br>25,000 ppm          | 2 years               |
| Dimethyl Ether | Inhalation | liver  | Not classified | Rat           | NOAEL<br>20,000 ppm          | 30 weeks              |
| Pentane        | Inhalation | peripheral nervous<br>system   | Not classified | Human         | NOAEL Not<br>available       | occupational exposure |
| Pentane        | Inhalation | heart   skin  <br>endocrine system  <br>bone, teeth, nails,<br>and/or hair | Not classified | Rat           | NOAEL 20<br>mg/l             | 13 weeks              |

|  |            | hematopoietic<br>system   liver  <br>immune system  <br>muscles   nervous  |  |                               |                             |                          |
|--|------------|--|--|-------------------------------|-----------------------------|--------------------------|
|  |            | system   eyes  <br>kidney and/or<br>bladder   respiratory<br>system  |  |                               |                             |                          |
| Pentane                                    | Ingestion  | kidney and/or<br>bladder   | Not classified   | Rat                           | NOAEL<br>2,000<br>mg/kg/day | 28 days                  |
| Butane                                     | Inhalation | kidney and/or<br>bladder   blood   | Not classified   | Rat                           | NOAEL<br>4,489 ppm          | 90 days                  |
| Isobutane                                  | Inhalation | kidney and/or<br>bladder   | Not classified   | Rat                           | NOAEL<br>4,500 ppm          | 13 weeks                 |
| 2-methylbutane                             | Inhalation | peripheral nervous system  | Not classified   | Human                         | NOAEL Not<br>available      | occupational exposure    |
| 2-methylbutane                             | Inhalation | heart   skin  <br>endocrine system  <br>bone, teeth, nails,<br>and/or hair  <br>hematopoietic<br>system   liver  <br>immune system  <br>muscles   nervous<br>system   eyes  <br>kidney and/or<br>bladder   respiratory<br>system | Not classified   | Rat                           | NOAEL 20<br>mg/l            | 13 weeks                 |
| 2-methylbutane                             | Ingestion  | kidney and/or<br>bladder   | Not classified   | Rat                           | NOAEL<br>2,000<br>mg/kg/day | 28 days                  |
| Naphtha (petroleum),<br>hydrotreated heavy | Inhalation | nervous system   | Not classified   | Rat                           | LOAEL 4.6<br>mg/l           | 6 months                 |
| Naphtha (petroleum),<br>hydrotreated heavy | Inhalation | kidney and/or<br>bladder   | Not classified   | Rat                           | LOAEL 1.9<br>mg/l           | 13 weeks                 |
| Naphtha (petroleum),<br>hydrotreated heavy | Inhalation | respiratory system   | Not classified   | Multiple<br>animal<br>species | NOAEL 0.6<br>mg/l           | 90 days                  |
| Naphtha (petroleum),<br>hydrotreated heavy | Inhalation | bone, teeth, nails,<br>and/or hair   blood  <br>liver   muscles  | Not classified   | Rat                           | NOAEL 5.6<br>mg/l           | 12 weeks                 |
| Naphtha (petroleum),<br>hydrotreated heavy | Inhalation | heart  | Not classified   | Multiple<br>animal<br>species | NOAEL 1.3<br>mg/l           | 90 days                  |
| Methylcyclohexane                          | Inhalation | kidney and/or<br>bladder   | Not classified   | Rat                           | NOAEL 1.6<br>mg/l           | 12 months                |
| Methylcyclohexane                          | Inhalation | liver  | Not classified   | Rabbit                        | NOAEL 12<br>mg/l            | 10 weeks                 |
| Limestone                                  | Inhalation | respiratory system   | Not classified   | Human                         | NOAEL Not<br>available      | occupational<br>exposure |
| n-hexane                                   | Inhalation | peripheral nervous<br>system   | Causes damage to organs through prolonged or repeated exposure               | Human                         | NOAEL Not<br>available      | occupational<br>exposure |
| n-hexane                                   | Inhalation | respiratory system   | Some positive data exist, but the data are not sufficient for classification | Mouse                         | LOAEL 1.76<br>mg/l          | 13 weeks                 |
| n-hexane                                   | Inhalation | liver  | Not classified   | Rat                           | NOAEL Not<br>available      | 6 months                 |
| n-hexane                                   | Inhalation | kidney and/or<br>bladder   | Not classified   | Rat                           | LOAEL 1.76<br>mg/l          | 6 months                 |
| n-hexane                                   | Inhalation | hematopoietic<br>system  | Not classified   | Mouse                         | NOAEL 35.2<br>mg/l          | 13 weeks                 |
| n-hexane                                   | Inhalation | auditory system  <br>immune system  <br>eyes   | Not classified   | Human                         | NOAEL Not<br>available      | occupational<br>exposure |
| n-hexane                                   | Inhalation | heart   skin  <br>endocrine system   | Not classified   | Rat                           | NOAEL 1.76<br>mg/l          | 6 months                 |
| n-hexane                                   | Ingestion  | peripheral nervous   | Some positive data exist, but the  | Rat                           | NOAEL                       | 90 days                  |

|          |           | system   | data are not sufficient for<br>classification |     | 1,140<br>mg/kg/day     |          |
|----------|-----------|--|---|-----|------------------------|----------|
| n-hexane | Ingestion | endocrine system  <br>hematopoietic<br>system   liver  <br>immune system  <br>kidney and/or<br>bladder | Not classified                                | Rat | NOAEL Not<br>available | 13 weeks |

#### **Aspiration Hazard**

| Name   | Value             |
|--|-------------------|
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics | Aspiration hazard |
| Pentane  | Aspiration hazard |
| Hydrocarbons, C6, isoalkanes, < 5% n- Hexane     | Aspiration hazard |
| 2-methylbutane                                   | Aspiration hazard |
| Naphtha (petroleum), hydrotreated heavy          | Aspiration hazard |
| Methylcyclohexane                                | Aspiration hazard |
| Cyclopentane                                     | Aspiration hazard |
| n-hexane   | 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**

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 Nbr      | Organism        | Туре  | Exposure | Test endpoint    | Test result |
|---|--------------|-----------------|---|----------|------------------|-------------|
| Nonvolatile<br>components   | Trade Secret |                 | Data not available<br>or insufficient for<br>classification |          |                  |             |
| Acetone   | 67-64-1      | Crustacea other | Experimental  | 24 hours | LC50             | 2,100 mg/l  |
| Acetone   | 67-64-1      | Rainbow trout   | Experimental  | 96 hours | LC50             | 5,540 mg/l  |
| Acetone   | 67-64-1      | Algae other     | Experimental  | 96 hours | EC50             | 11,493 mg/l |
| Acetone   | 67-64-1      | Water flea      | Experimental  | 21 days  | NOEC             | 1,000 mg/l  |
| Propane   | 74-98-6      |                 | Data not available<br>or insufficient for<br>classification |          |                  |             |
| Butadiene-styrene-<br>meta-divinylbenzene<br>polymer                  | 26471-45-4   |                 | Data not available<br>or insufficient for<br>classification |          |                  |             |
| Dimethyl Ether  | 115-10-6     | Water flea      | Experimental  | 48 hours | EC50             | >4,400 mg/l |
| Dimethyl Ether  | 115-10-6     | Guppy           | Experimental  | 96 hours | LC50             | >4,100 mg/l |
| Resin acids and Rosin<br>acids, hydrogenated,<br>esters with glycerol | 65997-13-9   | Water flea      | Estimated   |          | Effect Level 50% | >100 mg/l   |
| Resin acids and Rosin<br>acids, hydrogenated,<br>esters with glycerol | 65997-13-9   | Fathead minnow  | Estimated   |          | Lethal Level 50% | >100 mg/l   |

| acids, hydrogenated,<br>esters with glycerol<br>Resin acids and Rosin 6<br>acids, hydrogenated,<br>esters with glycerol   | 55997-13-9<br>55997-13-9 | Green algae      | Estimated           |           | Effect Level 50%       | >100 mg/l  |
|---|--------------------------|------------------|---------------------|-----------|------------------------|------------|
| esters with glycerol<br>Resin acids and Rosin 6<br>acids, hydrogenated,<br>esters with glycerol<br>Hydrocarbons, C7, n- 9 | 55997-13-9               |                  |                     |           |                        |            |
| Resin acids and Rosin 6<br>acids, hydrogenated,<br>esters with glycerol<br>Hydrocarbons, C7, n- 9                         | 65997-13-9               |                  |                     |           | 1                      |            |
| acids, hydrogenated,<br>esters with glycerol<br>Hydrocarbons, C7, n- 9  | 55777-15-7               | Green Algae      | Estimated           |           | No obs Effect          | >100 mg/l  |
| esters with glycerol<br>Hydrocarbons, C7, n- 9  |                          | Gitten Algat     | Estimated           |           | Level                  | >100 mg/1  |
| Hydrocarbons, C7, n- 9  |                          |                  |                     |           | Level                  |            |
|   | 927-510-4                |                  | Data not available  |           |                        |            |
|   | 927-310-4                |                  | or insufficient for |           |                        |            |
|   |                          |                  |                     |           |                        |            |
| cyclics   | 06.05.0                  |                  | classification      |           |                        |            |
| Butane 1  | 106-97-8                 |                  | Data not available  |           |                        |            |
|   |                          |                  | or insufficient for |           |                        |            |
|   |                          |                  | classification      |           |                        |            |
|   | 931-254-9                |                  | Data not available  |           |                        |            |
| isoalkanes, < 5% n-   |                          |                  | or insufficient for |           |                        |            |
| Hexane  |                          |                  | classification      |           |                        |            |
| Pentane 1   | 109-66-0                 | Rainbow trout    | Experimental        | 96 hours  | LC50                   | 4.26 mg/l  |
| Pentane 1   | 109-66-0                 | Water flea       | Experimental        | 48 hours  | EC50                   | 2.7 mg/l   |
|   |                          |                  |                     |           |                        |            |
| Pentane 1   | 109-66-0                 | Green Algae      | Experimental        | 72 hours  | EC50                   | 10.7 mg/l  |
|   |                          | _                | -                   |           |                        | _          |
| Pentane 1   | 109-66-0                 | Green Algae      | Experimental        | 72 hours  | NOEC                   | 2.04 mg/l  |
| Isobutane 7   | 75-28-5                  |                  | Data not available  |           |                        |            |
|   |                          |                  | or insufficient for |           |                        |            |
|   |                          |                  | classification      |           |                        |            |
| Naphtha (petroleum), 6  | 64742-48-9               | Green Algae      | Estimated           | 72 hours  | Effect Level 50%       | 3.1 mg/l   |
| hydrotreated heavy  | 51712 10 5               | Green ringue     | Estimated           | /2 110015 |                        | 5.1 mg/l   |
|   | 54742-48-9               | Water flea       | Estimated           | 48 hours  | Effect Level 50%       | 4.5 mg/l   |
| hydrotreated heavy  | 54742-40-7               | water nea        | LStillated          | 40 110013 |                        | 4.5 mg/1   |
|   | 54742-48-9               | Fathead minnow   | Estimated           | 96 hours  | Lethal Level 50%       | 8.2 mg/l   |
| hydrotreated heavy  | 94742-40-9               | ratileau minitow | Estimated           | 90 nours  | Leulai Level 5076      | 8.2 mg/1   |
|   | 54742-48-9               | Watan flag       | E-timeted           | 21 4      | No obs Effect          | 2.6        |
|   | 54/42-48-9               | Water flea       | Estimated           | 21 days   |                        | 2.6 mg/l   |
| hydrotreated heavy  |                          |                  |                     | 50.1      | Level                  |            |
| Naphtha (petroleum), 6<br>hydrotreated heavy  | 54742-48-9               | Green Algae      | Estimated           | 72 hours  | No obs Effect<br>Level | 0.5 mg/l   |
|   | 78-78-4                  |                  | Data not available  |           | Level                  |            |
| 2-methylbutane /  | /8-/8-4                  |                  | or insufficient for |           |                        |            |
|   |                          |                  |                     |           |                        |            |
| T: / 1  | 1317-65-3                | XXZ 4            | classification      | 96 hours  | LC50                   | > 100 //   |
| Limestone 1   | 131/-65-3                | Western          | Experimental        | 96 nours  | LC50                   | >100 mg/l  |
|   |                          | Mosquitofish     |                     |           | NORG                   | 100 /      |
| Limestone 1   | 1317-65-3                | Rainbow trout    | Experimental        | 42 days   | NOEC                   | >100 mg/l  |
|   |                          |                  |                     | 40.1      | 2010                   |            |
| Cyclopentane 2  | 287-92-3                 | Water flea       | Experimental        | 48 hours  | EC50                   | 10.5 mg/l  |
|   |                          |                  |                     |           |                        |            |
| Methylcyclohexane 1   | 108-87-2                 | Ricefish         | Experimental        | 96 hours  | LC50                   | 2.07 mg/l  |
|   |                          |                  |                     |           |                        |            |
| Methylcyclohexane 1   | 108-87-2                 | Water flea       | Experimental        | 48 hours  | EC50                   | 0.326 mg/l |
|   |                          |                  |                     |           |                        |            |
| Methylcyclohexane 1   | 108-87-2                 | Green Algae      | Experimental        | 72 hours  | EC50                   | 0.134 mg/l |
|   |                          |                  |                     |           |                        |            |
| Methylcyclohexane 1   | 108-87-2                 | Green Algae      | Experimental        | 72 hours  | NOEC                   | 0.022 mg/l |
|   |                          |                  |                     |           |                        |            |
| n-hexane 1  | 110-54-3                 | Fathead minnow   | Experimental        | 96 hours  | LC50                   | 2.5 mg/l   |
|   |                          |                  |                     |           |                        |            |
| n-hexane 1  | 110-54-3                 | Water flea       | Experimental        | 48 hours  | LC50                   | 3.9 mg/l   |
|   |                          |                  |                     |           | 1                      |            |

## 12.2. Persistence and degradability

| Material               | CAS Nbr      | Test type                      | Duration | Study Type           | Test result      | Protocol                          |
|------------------------|--------------|--------------------------------|----------|----------------------|------------------|-----------------------------------|
| Nonvolatile components | Trade Secret | Experimental<br>Biodegradation | 28 days  | BOD                  | 0 % weight       | OECD 301C - MITI test (I)         |
| Acetone                | 67-64-1      | Experimental<br>Biodegradation | 28 days  | BOD                  |                  | OECD 301D - Closed bottle<br>test |
| Acetone                | 67-64-1      | Experimental                   |          | Photolytic half-life | 147 days (t 1/2) | Other methods                     |

|   |            | Photolysis  |         | (in air)                         |                      |  |
|---|------------|---|---------|----------------------------------|----------------------|--|
| Propane   | 74-98-6    | Experimental<br>Photolysis                                  |         | Photolytic half-life<br>(in air) | 27.5 days (t<br>1/2) | Other methods                          |
| Butadiene-styrene-meta-<br>divinylbenzene polymer                     | 26471-45-4 | Data not available<br>or insufficient for<br>classification | N/A     | N/A                              | N/A                  | N/A                                    |
| Dimethyl Ether  | 115-10-6   | Experimental<br>Photolysis                                  |         | Photolytic half-life<br>(in air) | 12.4 days (t<br>1/2) | Other methods                          |
| Dimethyl Ether  | 115-10-6   | Experimental<br>Biodegradation                              | 28 days | BOD                              | 5 % weight           | OECD 301D - Closed bottle test         |
| Resin acids and Rosin acids,<br>hydrogenated, esters with<br>glycerol | 65997-13-9 | Experimental<br>Biodegradation                              | 28 days | CO2 evolution                    | 47.3 % weight        | OECD 301B - Modified<br>sturm or CO2   |
| Hydrocarbons, C7, n-<br>alkanes, isoalkanes, cyclics                  | 927-510-4  | Estimated<br>Biodegradation                                 | 28 days | BOD                              | 98 %<br>BOD/ThBOD    | OECD 301F - Manometric<br>respirometry |
| Butane  | 106-97-8   | Experimental<br>Photolysis                                  |         | Photolytic half-life<br>(in air) | 12.3 days (t<br>1/2) | Other methods                          |
| Hydrocarbons, C6,<br>isoalkanes, < 5% n- Hexane                       | 931-254-9  | Data not available<br>or insufficient for<br>classification | N/A     | N/A                              | N/A                  | N/A                                    |
| Pentane   | 109-66-0   | Experimental<br>Biodegradation                              | 28 days | BOD                              | 87 %<br>BOD/ThBOD    | OECD 301F - Manometric<br>respirometry |
| Pentane   | 109-66-0   | Experimental<br>Photolysis                                  |         | Photolytic half-life<br>(in air) | 8.07 days (t<br>1/2) | Other methods                          |
| Isobutane   | 75-28-5    | Experimental<br>Photolysis                                  |         | Photolytic half-life<br>(in air) | 13.4 days (t<br>1/2) | Other methods                          |
| Naphtha (petroleum),<br>hydrotreated heavy                            | 64742-48-9 | Estimated<br>Biodegradation                                 | 28 days | BOD                              | 10 %<br>BOD/ThBOD    | OECD 301D - Closed bottle test         |
| 2-methylbutane  | 78-78-4    | Experimental<br>Biodegradation                              | 28 days | BOD                              | 71.43 %<br>BOD/ThBOD | Other methods                          |
| 2-methylbutane  | 78-78-4    | Experimental<br>Photolysis                                  |         | Photolytic half-life<br>(in air) | 8.11 days (t<br>1/2) | Other methods                          |
| Limestone   | 1317-65-3  | Data not available<br>or insufficient for<br>classification | N/A     | N/A                              | N/A                  | N/A                                    |
| Cyclopentane  | 287-92-3   | Experimental<br>Photolysis                                  |         | Photolytic half-life<br>(in air) | 6.11 days (t<br>1/2) | Other methods                          |
| Cyclopentane  | 287-92-3   | Experimental<br>Biodegradation                              | 28 days | BOD                              | 0 %<br>BOD/ThBOD     | OECD 301F - Manometric respirometry    |
| Methylcyclohexane   | 108-87-2   | Estimated<br>Photolysis                                     |         | Photolytic half-life<br>(in air) | 3.1 days (t 1/2)     | Other methods                          |
| Methylcyclohexane   | 108-87-2   | Experimental<br>Biodegradation                              | 28 days | BOD                              | 0 % weight           | OECD 301D - Closed bottle<br>test      |
| n-hexane  | 110-54-3   | Experimental<br>Bioconcentration                            | 28 days | BOD                              | 100 % weight         | OECD 301C - MITI test (I)              |
| n-hexane  | 110-54-3   | Experimental<br>Photolysis                                  |         | Photolytic half-life<br>(in air) | 5.4 days (t 1/2)     | Other methods                          |

# 12.3 : Bioaccumulative potential

| Material  | CAS Nbr      | Test type   | Duration | Study Type                | Test result | Protocol                           |
|---|--------------|---|----------|---------------------------|-------------|------------------------------------|
| Nonvolatile components  | Trade Secret | Estimated BCF-<br>Carp                                      | 70 days  | Bioaccumulation factor    | 11100       | Other methods                      |
| Acetone   | 67-64-1      | Experimental<br>Bioconcentration                            |          | Log Kow                   | -0.24       | Other methods                      |
| Propane   | 74-98-6      | Experimental<br>Bioconcentration                            |          | Log Kow                   | 2.36        | Other methods                      |
| Butadiene-styrene-meta-<br>divinylbenzene polymer                     | 26471-45-4   | Data not available<br>or insufficient for<br>classification | N/A      | N/A                       | N/A         | N/A                                |
| Dimethyl Ether  | 115-10-6     | Data not available<br>or insufficient for<br>classification | N/A      | N/A                       | N/A         | N/A                                |
| Resin acids and Rosin<br>acids, hydrogenated, esters<br>with glycerol | 65997-13-9   | Estimated<br>Bioconcentration                               |          | Bioaccumulation<br>factor | 7.4         | Estimated: Bioconcentration factor |

| Hydrocarbons, C7, n-                               | 927-510-4  | Data not available  | N/A     | N/A                       | N/A   | N/A   |
|--|------------|---|---------|---------------------------|-------|---|
| alkanes, isoalkanes, cyclics                       |            | or insufficient for<br>classification                       |         |                           |       |   |
| Butane   | 106-97-8   | Experimental<br>Bioconcentration                            |         | Log Kow                   | 2.89  | Other methods   |
| Hydrocarbons, C6,<br>isoalkanes, < 5% n-<br>Hexane | 931-254-9  | Data not available<br>or insufficient for<br>classification | N/A     | N/A                       | N/A   | N/A   |
| Pentane  | 109-66-0   | Estimated<br>Bioconcentration                               |         | Bioaccumulation<br>factor | 26    | Estimated: Bioconcentration factor                        |
| Isobutane  | 75-28-5    | Experimental<br>Bioconcentration                            |         | Log Kow                   | 2.76  | Other methods   |
| Naphtha (petroleum),<br>hydrotreated heavy         | 64742-48-9 | Data not available<br>or insufficient for<br>classification | N/A     | N/A                       | N/A   | N/A   |
| 2-methylbutane                                     | 78-78-4    | Experimental<br>Bioconcentration                            |         | Log Kow                   | 2.3   | Other methods   |
| Limestone  | 1317-65-3  | Data not available<br>or insufficient for<br>classification | N/A     | N/A                       | N/A   | N/A   |
| Cyclopentane                                       | 287-92-3   | Experimental<br>Bioconcentration                            |         | Log Kow                   | 3.00  | Other methods   |
| Methylcyclohexane                                  | 108-87-2   | Experimental BCF-<br>Carp                                   | 56 days | Bioaccumulation factor    | <=321 | OECD 305E -<br>Bioaccumulation flow-<br>through fish test |
| n-hexane   | 110-54-3   | Estimated<br>Bioconcentration                               |         | Bioaccumulation factor    | 50    | Estimated: Bioconcentration factor                        |

#### 12.4. Mobility in soil

Please contact manufacturer for more details

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

No information available at this time, contact manufacturer for more details

#### 12.6. Other adverse effects

| Material | CAS Nbr | <b>Ozone Depletion Potential</b> | Global Warming Potential |
|----------|---------|----------------------------------|--------------------------|
| acetone  | 67-64-1 | 0                                |                          |

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. As a disposal alternative, utilize an acceptable permitted waste disposal facility. The facility should be equipped to handle gaseous waste. 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)

16 05 04\* Gases in pressure containers (including halons) containing dangerous substances

20 01 27\* Paint, inks, adhesives and resins containing dangerous substances

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

15 01 04 Metallic packaging

### **SECTION 14: Transportation information**

#### YP-2080-6067-0

ADR/RID: UN1950, AEROSOLS, LIMITED QUANTITY, 2.1, (E), ADR Classification Code: 5F. IMDG-CODE: UN1950, AEROSOLS, 2.1, IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FD,SU. ICAO/IATA: UN1950, AEROSOLS, FLAMMABLE, 2.1.

# **SECTION 15: Regulatory information**

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

#### **Global inventory status**

Contact 3M for more information.

#### 15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out for the relevant substances in this material by the registrant 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.   |
| H222   | Extremely flammable aerosol.                                       |
| H224   | Extremely flammable liquid and vapour.                             |
| H225   | Highly flammable liquid and vapour.                                |
| H229   | Pressurised container. may burst if heated.                        |
| H280   | Contains gas under pressure; may explode if heated.                |
| H304   | May be fatal if swallowed and enters airways.                      |
| H315   | Causes skin irritation.  |
| H319   | Causes serious eye irritation.                                     |
| H336   | May cause drowsiness or dizziness.                                 |
| H361f  | Suspected of damaging fertility.                                   |
| H373   | May cause damage to organs through prolonged or repeated exposure. |
| H411   | Toxic to aquatic life with long lasting effects.                   |
| H412   | Harmful to aquatic life with long lasting effects.                 |

#### **Revision information:**

Section 12: Component ecotoxicity information information was modified.

# Annex

| 1. Title                 |   |  |
|--------------------------|---|--|
| Substance identification | Hydrocarbons, C6, isoalkanes, < 5% n- Hexane;     |  |
|                          | EC No. 931-254-9;                                 |  |
|                          | Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; |  |
|                          | EC No. 927-510-4;                                 |  |
|                          |   |  |

| Exposure Scenario Name                  | Professional Application of Coatings   |
|---|--|
| Lifecycle Stage                         | Widespread use by professional workers   |
| Contributing activities                 | PROC 11 -Non industrial spraying   |
| 5                                       | ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or   |
|   | onto article, indoor)  |
| Processes, tasks and activities covered | Application of product. Spraying of substances/mixtures.                       |
| 2. Operational conditions and risk mana | gement measures  |
| Operating Conditions                    | Physical state: Liquid.  |
|   | General operating conditions:  |
|   | Assumes use at not more than 20°C above ambient temperature;                   |
|   | Duration of exposure per day at workplace [for one worker]: 8 hours/day;       |
|   | Emission days per year: 365 days/year;   |
|   | Indoor use;  |
|   | Outdoor use;   |
|   |  |
| <b>Risk management measures</b>         | Under the operational conditions described above the following risk management |
|   | measures apply:  |
|   | General risk management measures:  |
|   | Human health:  |
|   | None needed;   |
|   | Environmental:   |
|   | None needed;   |
|   |  |
| Waste management measures               | No use-specific waste management measures are required for this product. Refer |
|   | to Section 13 of main SDS for disposal instructions:                           |
| 3. Prediction of exposure               |  |
| Prediction of exposure                  | Human and environmental exposures are not expected to exceed the DNELs and     |
|   | PNECs when the identified risk management measures are adopted.                |

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.

#### 3M United Kingdom MSDSs are available at www.3M.com/uk