



## Safety Data Sheet

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|                                       |                   |                         |            |
|---------------------------------------|-------------------|-------------------------|------------|
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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 Scotch-Weld(TM) Spray 90

#### Product Identification Numbers

YP-2080-6128-0

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

##### Identified uses

Aerosol Adhesive.

#### 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  
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**

DANGER.

**Symbols:**

GHS02 (Flame) |GHS07 (Exclamation mark) |GHS09 (Environment) |

**Pictograms**



| Ingredient | CAS Nbr  | % by Wt |
|------------|----------|---------|
| Pentane    | 109-66-0 | 10 - 30 |
| Acetone    | 67-64-1  | 7 - 13  |

**HAZARD STATEMENTS:**

|      |  |
|------|--|
| H222 | Extremely flammable aerosol.                     |
| H229 | Pressurised container. may burst if heated.      |
| H319 | Causes serious eye irritation.                   |
| H336 | May cause drowsiness or dizziness.               |
| H411 | Toxic to aquatic life with long lasting effects. |

**PRECAUTIONARY STATEMENTS**

**General:**

P102 Keep out of reach of children.

**Prevention:**

P210A Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P251 Do not pierce or burn, even after use.

**Storage:**

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.

**SUPPLEMENTAL INFORMATION**

**Supplemental Hazard Statements:**

EUH066 Repeated exposure may cause skin dryness or cracking.

55% of the mixture consists of components of unknown acute oral toxicity.

Contains 7% 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.

**2.3. Other hazards**

**3M Scotch-Weld(TM) Spray 90**

None known.

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

| <b>Ingredient</b> | <b>CAS Nbr</b> | <b>EU Inventory</b> | <b>% by Wt</b> | <b>Classification</b>   |
|-------------------|----------------|---------------------|----------------|---|
| Dimethyl Ether    | 115-10-6       | EINECS 204-065-8    | 40 - 60        | Flam. Gas 1, H220; Liquefied gas, H280 - Nota U (CLP)   |
| Pentane           | 109-66-0       | EINECS 203-692-4    | 10 - 30        | Flam. Liq. 2, H225; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066; Aquatic Chronic 2, H411 - Nota C (CLP)                                    |
| Acetone           | 67-64-1        | EINECS 200-662-2    | 7 - 13         | Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336; EUH066 (CLP)   |
| Non-volatiles     | Trade Secret   |                     | 1 - 10         |   |
| Cyclohexane       | 110-82-7       | EINECS 203-806-2    | 1 - 10         | Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=1 (CLP) |
| 2-methylbutane    | 78-78-4        | EINECS 201-142-8    | 1 - 10         | Flam. Liq. 1, H224; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066; Aquatic Chronic 2, H411 (CLP)   |
| Non-volatiles     | Trade Secret   |                     | 3 - 7          |   |

Please see section 16 for the full text of any H statements referred to in this section

Please refer to section 15 for any applicable Notas that have been applied to the above components

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. If you feel unwell, get medical attention.

**Skin contact**

Wash with soap and water. If signs/symptoms develop, get medical attention.

**Eye contact**

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

**If swallowed**

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

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

See Section 11.1 Information on toxicological effects

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

Not applicable.

## SECTION 5: Fire-fighting measures

### 5.1. 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

| <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.

## 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 vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment.

### 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. 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

Keep out of reach of children. 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 release to the environment. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

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

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. 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.

| <b>Ingredient</b> | <b>CAS Nbr</b> | <b>Agency</b> | <b>Limit type</b>   | <b>Additional comments</b> |
|-------------------|----------------|---------------|---|----------------------------|
| Pentane           | 109-66-0       | UK HSC        | TWA:1800 mg/m <sup>3</sup> (600 ppm)  |                            |
| Cyclohexane       | 110-82-7       | UK HSC        | TWA:350 mg/m <sup>3</sup> (100 ppm);STEL:1050 mg/m <sup>3</sup> (300 ppm)   |                            |
| Dimethyl Ether    | 115-10-6       | UK HSC        | TWA:766 mg/m <sup>3</sup> (400 ppm);STEL:958 mg/m <sup>3</sup> (500 ppm)    |                            |
| Acetone           | 67-64-1        | UK HSC        | TWA:1210 mg/m <sup>3</sup> (500 ppm);STEL:3620 mg/m <sup>3</sup> (1500 ppm) |                            |
| 2-methylbutane    | 78-78-4        | UK HSC        | TWA:1800 mg/m <sup>3</sup> (600 ppm)  |                            |

UK HSC : UK Health and Safety Commission

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.

**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:

Indirect vented goggles.

**Skin/hand protection**

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective

## 3M Scotch-Weld(TM) Spray 90

clothing.

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        |

### 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 and particulates

Half facepiece or full facepiece supplied-air respirator

Organic vapour respirators may have short service life.

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

## SECTION 9: Physical and chemical properties

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

|   |  |
|---|--|
| <b>Physical state</b>                         | Liquid.  |
| <b>Specific Physical Form:</b>                | Aerosol  |
| <b>Appearance/Odour</b>                       | Solvent odour; Clear                               |
| <b>Odour threshold</b>                        | <i>No data available.</i>                          |
| <b>pH</b>                                     | <i>Not applicable.</i>                             |
| <b>Boiling point/boiling range</b>            | <i>Not applicable.</i>                             |
| <b>Melting point</b>                          | <i>Not applicable.</i>                             |
| <b>Flammability (solid, gas)</b>              | Not applicable.                                    |
| <b>Explosive properties</b>                   | Not classified                                     |
| <b>Oxidising properties</b>                   | Not classified                                     |
| <b>Flash point</b>                            | $\geq -55$ °C [ <i>Test Method: Closed Cup</i> ]   |
| <b>Autoignition temperature</b>               | <i>No data available.</i>                          |
| <b>Flammable Limits(LEL)</b>                  | <i>No data available.</i>                          |
| <b>Flammable Limits(UEL)</b>                  | <i>No data available.</i>                          |
| <b>Relative density</b>                       | 0.71 g/cm <sup>3</sup> [ <i>Ref Std: WATER=1</i> ] |
| <b>Water solubility</b>                       | Nil  |
| <b>Solubility- non-water</b>                  | <i>Not applicable.</i>                             |
| <b>Partition coefficient: n-octanol/water</b> | <i>No data available.</i>                          |
| <b>Evaporation rate</b>                       | <i>No data available.</i>                          |
| <b>Vapour density</b>                         | <i>No data available.</i>                          |
| <b>Decomposition temperature</b>              | <i>No data available.</i>                          |
| <b>Viscosity</b>                              | <i>Not applicable.</i>                             |
| <b>Density</b>                                | 0.71 g/ml  |

### 9.2. Other information

|  |                           |
|--|---------------------------|
| <b>Volatile organic compounds (VOC)</b>              | 636 g/l                   |
| <b>Percent volatile</b>                              | 89.6 % weight             |
| <b>VOC less H<sub>2</sub>O &amp; exempt solvents</b> | <i>No data available.</i> |

## 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 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

Dermal Defatting: Signs/symptoms may include localised redness, itching, drying and cracking of skin.

#### 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.

**3M Scotch-Weld(TM) Spray 90****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 | Ingestion                  |         | No data available; calculated ATE >5,000 mg/kg |
| Dimethyl Ether  | Inhalation-Gas (4 hours)   | Rat     | LC50 164,000 ppm                               |
| Pentane         | Dermal                     | Rabbit  | LD50 3,000 mg/kg                               |
| Pentane         | Inhalation-Vapor (4 hours) | Rat     | LC50 > 18 mg/l                                 |
| Pentane         | Ingestion                  | Rat     | LD50 > 2,000 mg/kg                             |
| Acetone         | Dermal                     | Rabbit  | LD50 > 15,688 mg/kg                            |
| Acetone         | Inhalation-Vapor (4 hours) | Rat     | LC50 76 mg/l                                   |
| Acetone         | Ingestion                  | Rat     | LD50 5,800 mg/kg                               |
| 2-methylbutane  | Dermal                     | Rabbit  | LD50 3,000 mg/kg                               |
| 2-methylbutane  | Inhalation-Vapor (4 hours) | Rat     | LC50 > 18 mg/l                                 |
| 2-methylbutane  | Ingestion                  | Rat     | LD50 > 2,000 mg/kg                             |
| Non-volatiles   | Ingestion                  | Rat     | LD50 > 34,000 mg/kg                            |
| Cyclohexane     | Dermal                     | Rat     | LD50 > 2,000 mg/kg                             |
| Cyclohexane     | Inhalation-Vapor (4 hours) | Rat     | LC50 > 32.9 mg/l                               |
| Cyclohexane     | Ingestion                  | Rat     | LD50 6,200 mg/kg                               |
| Non-volatiles   | Dermal                     | Rabbit  | LD50 > 2,000 mg/kg                             |
| Non-volatiles   | Ingestion                  | Rat     | LD50 > 5,000 mg/kg                             |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name           | Species                | Value                     |
|----------------|------------------------|---------------------------|
| Pentane        | Rabbit                 | Minimal irritation        |
| Acetone        | Mouse                  | Minimal irritation        |
| 2-methylbutane | Rabbit                 | Minimal irritation        |
| Cyclohexane    | Rabbit                 | Mild irritant             |
| Non-volatiles  | Professional judgement | No significant irritation |

**Serious Eye Damage/Irritation**

| Name           | Species | Value           |
|----------------|---------|-----------------|
| Pentane        | Rabbit  | Mild irritant   |
| Acetone        | Rabbit  | Severe irritant |
| 2-methylbutane | Rabbit  | Mild irritant   |
| Cyclohexane    | Rabbit  | Mild irritant   |

**Skin Sensitisation**

| Name           | Species    | Value           |
|----------------|------------|-----------------|
| Pentane        | Guinea pig | Not sensitising |
| 2-methylbutane | Guinea pig | Not sensitising |



**3M Scotch-Weld(TM) Spray 90****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  |
| Pentane        | In vivo  | Not mutagenic  |
| Pentane        | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Acetone        | In vivo  | Not mutagenic  |
| Acetone        | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 2-methylbutane | In vivo  | Not mutagenic  |
| 2-methylbutane | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Cyclohexane    | In Vitro | Not mutagenic  |
| Cyclohexane    | In vivo  | Some positive data exist, but the data are not sufficient for classification |

**Carcinogenicity**

| Name           | Route          | Species                 | Value            |
|----------------|----------------|-------------------------|------------------|
| Dimethyl Ether | Inhalation     | Rat                     | Not carcinogenic |
| Acetone        | Not specified. | Multiple animal species | Not carcinogenic |

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

| Name           | Route      | Value  | Species | Test result           | Exposure Duration    |
|----------------|------------|--|---------|-----------------------|----------------------|
| Dimethyl Ether | Inhalation | Not toxic to development   | Rat     | NOAEL 40,000 ppm      | during organogenesis |
| Pentane        | Ingestion  | Not toxic to development   | Rat     | NOAEL 1,000 mg/kg/day | during organogenesis |
| Pentane        | Inhalation | Not toxic to development   | Rat     | NOAEL 30 mg/l         | during organogenesis |
| Acetone        | Ingestion  | Some positive male reproductive data exist, but the data are not sufficient for classification | Rat     | NOAEL 1,700 mg/kg/day | 13 weeks             |
| Acetone        | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification     | Rat     | NOAEL 5.2 mg/l        | during organogenesis |
| 2-methylbutane | Ingestion  | Not toxic to development   | Rat     | NOAEL 1,000 mg/kg/day | during organogenesis |
| 2-methylbutane | Inhalation | Not toxic to development   | Rat     | NOAEL 30 mg/l         | during organogenesis |
| Cyclohexane    | Inhalation | Not toxic to female reproduction   | Rat     | NOAEL 24 mg/l         | 2 generation         |
| Cyclohexane    | Inhalation | Not toxic to male reproduction   | Rat     | NOAEL 24 mg/l         | 2 generation         |
| Cyclohexane    | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification     | Rat     | NOAEL 6.9 mg/l        | 2 generation         |

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

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure |
|------|-------|-----------------|-------|---------|-------------|----------|
|------|-------|-----------------|-------|---------|-------------|----------|

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|                |            |                                   |  |                         |                     | <b>Duration</b>        |
|----------------|------------|-----------------------------------|--|-------------------------|---------------------|------------------------|
| Dimethyl Ether | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Rat                     | LOAEL 10,000 ppm    | 30 minutes             |
| Dimethyl Ether | Inhalation | cardiac sensitization             | Some positive data exist, but the data are not sufficient for classification | Dog                     | NOAEL 100,000 ppm   | 5 minutes              |
| 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 sensitization             | Some positive data exist, but the data are not sufficient for classification | Dog                     | NOAEL Not available | not available          |
| Pentane        | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Professional judgement  | NOAEL Not available | not available          |
| Acetone        | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human                   | NOAEL Not available |                        |
| Acetone        | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Human                   | NOAEL Not available |                        |
| Acetone        | Inhalation | immune system                     | Some positive data exist, but the data are not sufficient for classification | Human                   | NOAEL 1.19 mg/l     | 6 hours                |
| Acetone        | Inhalation | liver                             | Some positive data exist, but the data are not sufficient for classification | Guinea pig              | NOAEL Not available |                        |
| Acetone        | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Human                   | NOAEL Not available | poisoning and/or abuse |
| 2-methylbutane | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Multiple animal species | NOAEL Not available | not available          |
| 2-methylbutane | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Not available           | NOAEL Not available | not available          |
| 2-methylbutane | Inhalation | cardiac sensitization             | Some positive data exist, but the data are not sufficient for classification | Dog                     | NOAEL Not available | not available          |
| 2-methylbutane | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Professional judgement  | NOAEL Not available | not available          |
| 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 |                        |

**Specific Target Organ Toxicity - repeated exposure**

| <b>Name</b>    | <b>Route</b> | <b>Target Organ(s)</b>    | <b>Value</b>   | <b>Species</b> | <b>Test result</b>  | <b>Exposure Duration</b> |
|----------------|--------------|---------------------------|--|----------------|---------------------|--------------------------|
| Dimethyl Ether | Inhalation   | hematopoietic system      | Some positive data exist, but the data are not sufficient for classification | Rat            | NOAEL 25,000 ppm    | 2 years                  |
| Dimethyl Ether | Inhalation   | liver                     | Some positive data exist, but the data are not sufficient for classification | Rat            | NOAEL 20,000 ppm    | 30 weeks                 |
| Pentane        | Inhalation   | peripheral nervous system | Some positive data exist, but the data are not sufficient for                | Human          | NOAEL Not available | occupational exposure    |

**3M Scotch-Weld(TM) Spray 90**

|                |            |   | classification   |            |                        |                       |
|----------------|------------|---|--|------------|------------------------|-----------------------|
| Pentane        | Inhalation | heart   skin   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system | All data are negative  | Rat        | NOAEL 20 mg/l          | 13 weeks              |
| Pentane        | Ingestion  | kidney and/or bladder   | All data are negative  | Rat        | NOAEL 2,000 mg/kg/day  | 28 days               |
| Acetone        | Dermal     | eyes  | Some positive data exist, but the data are not sufficient for classification | Guinea pig | NOAEL Not available    | 3 weeks               |
| Acetone        | Inhalation | hematopoietic system  | Some positive data exist, but the data are not sufficient for classification | Human      | NOAEL 3 mg/l           | 6 weeks               |
| Acetone        | Inhalation | immune system   | Some positive data exist, but the data are not sufficient for classification | Human      | NOAEL 1.19 mg/l        | 6 days                |
| Acetone        | Inhalation | kidney and/or bladder   | Some positive data exist, but the data are not sufficient for classification | Guinea pig | NOAEL 119 mg/l         | not available         |
| Acetone        | Inhalation | heart   liver   | All data are negative  | Rat        | NOAEL 45 mg/l          | 8 weeks               |
| Acetone        | Ingestion  | kidney and/or bladder   | Some positive data exist, but the data are not sufficient for classification | Rat        | NOAEL 900 mg/kg/day    | 13 weeks              |
| Acetone        | Ingestion  | heart   | Some positive data exist, but the data are not sufficient for classification | Rat        | NOAEL 2,500 mg/kg/day  | 13 weeks              |
| Acetone        | Ingestion  | hematopoietic system  | Some positive data exist, but the data are not sufficient for classification | Rat        | NOAEL 200 mg/kg/day    | 13 weeks              |
| Acetone        | Ingestion  | liver   | Some positive data exist, but the data are not sufficient for classification | Mouse      | NOAEL 3,896 mg/kg/day  | 14 days               |
| Acetone        | Ingestion  | eyes  | All data are negative  | Rat        | NOAEL 3,400 mg/kg/day  | 13 weeks              |
| Acetone        | Ingestion  | respiratory system  | All data are negative  | Rat        | NOAEL 2,500 mg/kg/day  | 13 weeks              |
| Acetone        | Ingestion  | muscles   | All data are negative  | Rat        | NOAEL 2,500 mg/kg      | 13 weeks              |
| Acetone        | Ingestion  | skin   bone, teeth, nails, and/or hair  | All data are negative  | Mouse      | NOAEL 11,298 mg/kg/day | 13 weeks              |
| 2-methylbutane | Inhalation | peripheral nervous system   | Some positive data exist, but the data are not sufficient for classification | Human      | NOAEL Not available    | occupational exposure |
| 2-methylbutane | Inhalation | heart   skin   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system | All data are negative  | Rat        | NOAEL 20 mg/l          | 13 weeks              |

**3M Scotch-Weld(TM) Spray 90**

|                |            |                           |  |        |                       |          |
|----------------|------------|---------------------------|--|--------|-----------------------|----------|
| 2-methylbutane | Ingestion  | kidney and/or bladder     | All data are negative  | Rat    | NOAEL 2,000 mg/kg/day | 28 days  |
| Cyclohexane    | Inhalation | liver                     | Some positive data exist, but the data are not sufficient for classification | Rat    | NOAEL 24 mg/l         | 90 days  |
| Cyclohexane    | Inhalation | auditory system           | Some positive data exist, but the data are not sufficient for classification | Rat    | NOAEL 1.7 mg/l        | 90 days  |
| Cyclohexane    | Inhalation | kidney and/or bladder     | Some positive data exist, but the data are not sufficient for classification | Rabbit | NOAEL 2.7 mg/l        | 10 weeks |
| Cyclohexane    | Inhalation | hematopoietic system      | Some positive data exist, but the data are not sufficient for classification | Mouse  | NOAEL 24 mg/l         | 14 weeks |
| Cyclohexane    | Inhalation | peripheral nervous system | All data are negative  | Rat    | NOAEL 8.6 mg/l        | 30 weeks |

**Aspiration Hazard**

| Name           | Value             |
|----------------|-------------------|
| Pentane        | Aspiration hazard |
| 2-methylbutane | Aspiration hazard |
| Cyclohexane    | 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       | Type  | Exposure | Test endpoint | Test result |
|----------------|--------------|----------------|---|----------|---------------|-------------|
| Acetone        | 67-64-1      | Green Algae    | Experimental  | 96 hours | EC50          | 2,574 mg/l  |
| Acetone        | 67-64-1      | Water flea     | Experimental  | 48 hours | EC50          | 13,500 mg/l |
| Acetone        | 67-64-1      | Rainbow trout  | Experimental  | 96 hours | LC50          | 5,540 mg/l  |
| Cyclohexane    | 110-82-7     | Water flea     | Experimental  | 48 hours | EC50          | 0.9 mg/l    |
| Cyclohexane    | 110-82-7     | Green Algae    | Experimental  | 72 hours | EC50          | 3.4 mg/l    |
| Cyclohexane    | 110-82-7     | Fathead minnow | Experimental  | 96 hours | LC50          | 4.53 mg/l   |
| Dimethyl Ether | 115-10-6     | Guppy          | Experimental  | 96 hours | LC50          | >4,000 mg/l |
| Dimethyl Ether | 115-10-6     | Water flea     | Experimental  | 48 hours | EC50          | >4,000 mg/l |
| 2-methylbutane | 78-78-4      |                | Data not available or insufficient for classification |          |               |             |
| 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 | EC50          | 7.51 mg/l   |
| Pentane        | 109-66-0     | Green Algae    | Experimental  | 72 hours | NOEC          | 2.04 mg/l   |
| Non-volatiles  | Trade Secret |                | Data not available or                                 |          |               |             |

**3M Scotch-Weld(TM) Spray 90**

|               |              |  |   |  |  |  |
|---------------|--------------|--|---|--|--|--|
|               |              |  | insufficient for classification                       |  |  |  |
| Non-volatiles | Trade Secret |  | Data not available or insufficient for classification |  |  |  |

**12.2. Persistence and degradability**

| Material       | CAS Nbr      | Test type                   | Duration | Study Type                    | Test result        | Protocol                            |
|----------------|--------------|-----------------------------|----------|-------------------------------|--------------------|-------------------------------------|
| Cyclohexane    | 110-82-7     | Experimental Photolysis     |          | Photolytic half-life (in air) | 4.14 days (t 1/2)  | Other methods                       |
| Pentane        | 109-66-0     | Experimental Photolysis     |          | Photolytic half-life (in air) | 8.07 days (t 1/2)  | Other methods                       |
| Dimethyl Ether | 115-10-6     | Experimental Photolysis     |          | Photolytic half-life (in air) | 10.77 days (t 1/2) | Other methods                       |
| 2-methylbutane | 78-78-4      | Experimental Photolysis     |          | Photolytic half-life (in air) | 8.11 days (t 1/2)  | Other methods                       |
| Pentane        | 109-66-0     | Experimental Biodegradation | 28 days  | BOD                           | 96 % weight        | OECD 301C - MITI test (I)           |
| Cyclohexane    | 110-82-7     | Experimental Biodegradation | 28 days  | BOD                           | 77 % weight        | OECD 301F - Manometric respirometry |
| Acetone        | 67-64-1      | Experimental Biodegradation | 28 days  | BOD                           | 96 % weight        | OECD 301C - MITI test (I)           |
| Non-volatiles  | Trade Secret | Experimental Biodegradation | 28 days  | BOD                           | 0 % weight         | OECD 301C - MITI test (I)           |

**12.3 : Bioaccumulative potential**

| Material       | CAS Nbr      | Test type   | Duration | Study Type             | Test result | Protocol                           |
|----------------|--------------|---|----------|------------------------|-------------|------------------------------------|
| 2-methylbutane | 78-78-4      | Estimated BCF - Other                                 |          | Bioaccumulation factor | 65          | Estimated: Bioconcentration factor |
| Pentane        | 109-66-0     | Estimated Bioconcentration                            |          | Bioaccumulation factor | 26          | Estimated: Bioconcentration factor |
| Cyclohexane    | 110-82-7     | Experimental BCF-Carp                                 | 56 days  | Bioaccumulation factor | <129        | Other methods                      |
| Acetone        | 67-64-1      | Experimental BCF - Other                              |          | Bioaccumulation factor | 0.65        | Other methods                      |
| Dimethyl Ether | 115-10-6     | Experimental Bioconcentration                         |          | Log Kow                | 0.2         | Other methods                      |
| Non-volatiles  | Trade Secret | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                                |
| Non-volatiles  | Trade Secret | Data not available or insufficient for classification | N/A      | N/A                    | N/A         | N/A                                |

**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

No information available.

## 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. 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

YP-2080-6128-0

**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

#### Carcinogenicity

Ingredient  
Non-volatiles

CAS Nbr  
Trade Secret

Classification  
Gr. 3: Not classifiable

Regulation  
International Agency  
for Research on Cancer

#### Global inventory status

Contact 3M for more information.

### 15.2. Chemical Safety Assessment

Not applicable

## 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.                    |
| 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.      |

### Revision information:

Section 2: Additional label requirements phrase information was deleted.  
Section 2: Indication of danger information information was deleted.  
Label: CLP Percent Unknown information was added.  
Label: CLP Precautionary - General information was modified.  
Label: CLP Precautionary - Prevention information was modified.  
Label: CLP Precautionary - Response information was deleted.  
Label: Graphic Text information was deleted.  
Label: Graphic information was deleted.  
Label: Signal Word information was modified.  
Section 2: Label ingredient information information was deleted.  
Section 2: R phrase reference information was deleted.  
Remark (phrase) information was deleted.  
Risk phrase information was deleted.  
Safety phrase information was deleted.  
Section 3: Composition/ Information of ingredients table information was modified.  
Section 03: Reference to H statement explanation in Section 016 information was added.  
Section 3: Reference to R and H statement explanation in Section 16 information was deleted.  
Section 3: Reference to section 15 for Nota info information was modified.  
Section 6: Accidental release clean-up information information was modified.  
Section 6: Accidental release personal information information was modified.  
Section 7: Precautions safe handling information information was modified.  
Section 8: Appropriate Engineering controls information information was modified.  
Section 8: Eye/face protection information information was modified.  
Section 8: Respiratory protection - recommended respirators information information was modified.  
Section 9: Solubility (non-water) information was deleted.  
Section 09: Solubility as text (non-water) information was added.  
Section 9: Vapor density text information was added.  
Section 9: Vapour density value information was deleted.  
Section 9: Vapour pressure value information was deleted.  
Section 11: Acute Toxicity table information was modified.  
Section 11: Health Effects - Ingestion information information was modified.  
Section 11: Health Effects - Inhalation information information was modified.  
Section 11: Reproductive Toxicity Table information was modified.

Section 11: Skin Corrosion/Irritation Table information was modified.  
Section 11: Skin Sensitization Table information was modified.  
Section 11: Target Organs - Single Table information was modified.  
Section 12: Component ecotoxicity information information was modified.  
Section 12: No PBT/vPvB information available warning information was added.  
Section 12: PBT/vPvB table row information was deleted.  
Section 12: Persistence and Degradability information information was modified.  
Section 12: Biocumulative potential information information was modified.  
Section 13: Standard Phrase Category Waste GHS information was modified.  
Section 15: Carcinogenicity information information was modified.  
Section 16: List of relevant R phrase information information was deleted.  
Section 16: List of relevant R-phrases information was deleted.

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.

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