



## 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 05917 Polyolefin Adhesion Promoter Aerosol

#### Product Identification Numbers

YP-2080-6025-8

7000116706

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

##### Identified uses

Automotive. Primer and adhesion promoter for plastic surfaces of instruments, electrical equipment and metal protection and/or cleaning.

#### 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

Reproductive Toxicity, Category 2 - Repr. 2; H361

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336

Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

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) | GHS08 (Health Hazard) |

**Pictograms**



**Ingredients:**

| Ingredient | CAS Nbr  | EC No.    | % by Wt |
|------------|----------|-----------|---------|
| Toluene    | 108-88-3 | 203-625-9 | 60 - 90 |

**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.                                 |                                    |
| H361d | Suspected of damaging the unborn child.                            |                                    |
| H373  | May cause damage to organs through prolonged or repeated exposure: | nervous system  <br>sensory organs |
| H412  | Harmful to aquatic life with long lasting effects.                 |                                    |

**PRECAUTIONARY STATEMENTS**

**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.   |
| P260E | Do not breathe vapour or spray.  |

**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. |
|------|--|

2% of the mixture consists of components of unknown acute oral toxicity.  
34% of the mixture consists of components of unknown acute dermal toxicity.

**3M 05917 Polyolefin Adhesion Promoter Aerosol**

Contains 2% of components with unknown hazards to the aquatic environment.

**Notes on labelling**

Updated per Regulation (EC) No. 648/2004 on detergents. H304 is not required on the label because the product is an aerosol.

Ingredients required per 648/2004 (not required on industrial label): <5%: Halogenated hydrocarbons.

**2.3. Other hazards**

None known.

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

| Ingredient | CAS Nbr  | EC No.    | REACH Registration No. | % by Wt | Classification  |
|------------|----------|-----------|------------------------|---------|---|
| Toluene    | 108-88-3 | 203-625-9 | 01-2119471310-51       | 60 - 90 | Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Repr. 2, H361d; STOT SE 3, H336; STOT RE 2, H373<br>Aquatic Chronic 3, H412<br>Eye Irrit. 2, H319 |
| Propane    | 74-98-6  | 200-827-9 | 01-2119486944-21       | 10 - 30 | Flam. Gas 1, H220; Liquefied gas, H280 - Nota U   |
| Butane     | 106-97-8 | 203-448-7 | 01-2119474691-32       | 1 - 5   | Flam. Gas 1, H220; Liquefied gas, H280 - Nota C,U   |
| Isobutane  | 75-28-5  | 200-857-2 | 01-2119485395-27       | 1 - 5   | Flam. Gas 1, H220; Liquefied gas, H280 - Nota C,U   |

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**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, 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

| <u>Substance</u>           | <u>Condition</u>   |
|----------------------------|--------------------|
| Carbon monoxide.           | During combustion. |
| Carbon dioxide.            | During combustion. |
| Irritant vapours or gases. | During combustion. |

### 5.3. Advice for fire-fighters

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

## SECTION 6: Accidental release measures

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

Evacuate area. 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

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. Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR-AFFF type foam 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**

For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. 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**

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.

| 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/m <sup>3</sup> (750 ppm)    |                     |
| Toluene    | 108-88-3 | UK HSC | TWA: 191 mg/m <sup>3</sup> (50 ppm);<br>STEL: 384 mg/m <sup>3</sup> (100 ppm) | SKIN                |
| Propane    | 74-98-6  | UK HSC | Limit value not established:  | asphyxiant          |

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.

**Derived no effect level (DNEL)**

| Ingredient | Degradation Product | Population | Human exposure pattern                                     | DNEL                  |
|------------|---------------------|------------|--|-----------------------|
| Toluene    |                     | Worker     | Dermal, Long-term exposure (8 hours), Systemic effects     | 384 mg/kg bw/d        |
| Toluene    |                     | Worker     | Inhalation, Long-term exposure (8 hours), Local effects    | 192 mg/m <sup>3</sup> |
| Toluene    |                     | Worker     | Inhalation, Long-term exposure (8 hours), Systemic effects | 192 mg/m <sup>3</sup> |
| Toluene    |                     | Worker     | Inhalation, Short-term exposure, Local effects             | 384 mg/m <sup>3</sup> |
| Toluene    |                     | Worker     | Inhalation, Short-term                                     | 384 mg/m <sup>3</sup> |

**3M 05917 Polyolefin Adhesion Promoter Aerosol**

|  |  |  |                            |  |
|--|--|--|----------------------------|--|
|  |  |  | exposure, Systemic effects |  |
|--|--|--|----------------------------|--|

**Predicted no effect concentrations (PNEC)**

| Ingredient | Degradation Product | Compartment            | PNEC            |
|------------|---------------------|------------------------|-----------------|
| Toluene    |                     | Agricultural soil      | 2.89 mg/kg d.w. |
| Toluene    |                     | Freshwater             | 0.68 mg/l       |
| Toluene    |                     | Sewage Treatment Plant | 13.61 mg/l      |

**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:

Full face shield.

Indirect vented goggles.

*Applicable Norms/Standards*

Use eye/face 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:

| Material                 | Thickness (mm)    | Breakthrough Time |
|--------------------------|-------------------|-------------------|
| Fluoroelastomer          | No data available | No data available |
| Polyvinyl alcohol (PVA). | No data available | No data available |
| Polymer laminate         | No data available | 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 air-purifying respirator suitable for organic vapours

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: filter type A

**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                       | Clear aerosol with a sweet, spicy odour. |
| Odour threshold                        | <i>No data available.</i>                |
| pH                                     | <i>Not applicable.</i>                   |
| Boiling point/boiling range            | <i>Not applicable.</i>                   |
| Melting point                          | <i>Not applicable.</i>                   |
| Flammability (solid, gas)              | Not applicable.                          |
| Explosive properties                   | Not classified                           |
| Oxidising properties                   | Not classified                           |
| Flash point                            | -4 °C [ <i>Test Method:</i> Closed Cup]  |
| Autoignition temperature               | <i>No data available.</i>                |
| Flammable Limits(LEL)                  | <i>No data available.</i>                |
| Flammable Limits(UEL)                  | <i>No data available.</i>                |
| Vapour pressure                        | <i>No data available.</i>                |
| Relative density                       | 0.76 [ <i>Ref Std:</i> WATER=1]          |
| Water solubility                       | <i>No data available.</i>                |
| Solubility- non-water                  | <i>No data available.</i>                |
| Partition coefficient: n-octanol/water | <i>No data available.</i>                |
| Evaporation rate                       | <i>No data available.</i>                |
| Vapour density                         | <i>No data available.</i>                |
| Decomposition temperature              | <i>No data available.</i>                |
| Viscosity                              | <i>Not applicable.</i>                   |
| Density                                | 0.76 g/cm <sup>3</sup>                   |

**9.2. Other information**

|                               |                           |
|-------------------------------|---------------------------|
| EU Volatile Organic Compounds | <i>No data available.</i> |
| Percent volatile              | 97.8 % 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**

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

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

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy 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.

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

Ocular effects: Signs/symptoms may include blurred or significantly impaired vision. Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Olfactory effects: Signs/symptoms may include decreased ability to detect odours and complete loss of smell. Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.



**3M 05917 Polyolefin Adhesion Promoter Aerosol****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 | Ingestion                   |         | No data available; calculated ATE >5,000 mg/kg |
| Toluene         | Dermal                      | Rat     | LD50 12,000 mg/kg                              |
| Toluene         | Inhalation-Vapour (4 hours) | Rat     | LC50 30 mg/l                                   |
| Toluene         | Ingestion                   | Rat     | LD50 5,550 mg/kg                               |
| Propane         | Inhalation-Gas (4 hours)    | Rat     | LC50 > 200,000 ppm                             |
| Isobutane       | Inhalation-Gas (4 hours)    | Rat     | LC50 276,000 ppm                               |
| Butane          | Inhalation-Gas (4 hours)    | Rat     | LC50 277,000 ppm                               |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name      | Species                | Value                     |
|-----------|------------------------|---------------------------|
| Toluene   | Rabbit                 | Irritant                  |
| Propane   | Rabbit                 | Minimal irritation        |
| Isobutane | Professional judgement | No significant irritation |
| Butane    | Professional judgement | No significant irritation |

**Serious Eye Damage/Irritation**

| Name      | Species                | Value                     |
|-----------|------------------------|---------------------------|
| Toluene   | Rabbit                 | Moderate irritant         |
| Propane   | Rabbit                 | Mild irritant             |
| Isobutane | Professional judgement | No significant irritation |
| Butane    | Rabbit                 | No significant irritation |

**Skin Sensitisation**

| Name    | Species    | Value          |
|---------|------------|----------------|
| Toluene | Guinea pig | 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**

**3M 05917 Polyolefin Adhesion Promoter Aerosol**

| Name      | Route    | Value         |
|-----------|----------|---------------|
| Toluene   | In Vitro | Not mutagenic |
| Toluene   | In vivo  | Not mutagenic |
| Propane   | In Vitro | Not mutagenic |
| Isobutane | In Vitro | Not mutagenic |
| Butane    | In Vitro | Not mutagenic |

**Carcinogenicity**

| Name    | Route      | Species | Value  |
|---------|------------|---------|--|
| Toluene | Dermal     | Mouse   | Some positive data exist, but the data are not sufficient for classification |
| Toluene | Ingestion  | Rat     | Some positive data exist, but the data are not sufficient for classification |
| Toluene | Inhalation | Mouse   | Some positive data exist, but the data are not sufficient for classification |

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

| Name    | Route      | Value                                  | Species | Test result         | Exposure Duration      |
|---------|------------|--|---------|---------------------|------------------------|
| Toluene | Inhalation | Not classified for female reproduction | Human   | NOAEL Not available | occupational exposure  |
| Toluene | Inhalation | Not classified for male reproduction   | Rat     | NOAEL 2.3 mg/l      | 1 generation           |
| Toluene | Ingestion  | Toxic to development                   | Rat     | LOAEL 520 mg/kg/day | during gestation       |
| Toluene | Inhalation | Toxic to development                   | Human   | NOAEL Not available | poisoning and/or abuse |

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

| Name      | Route      | Target Organ(s)                   | Value  | Species                 | Test result         | Exposure Duration      |
|-----------|------------|-----------------------------------|--|-------------------------|---------------------|------------------------|
| Toluene   | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human                   | NOAEL Not available |                        |
| Toluene   | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Human                   | NOAEL Not available |                        |
| Toluene   | Inhalation | immune system                     | Not classified   | Mouse                   | NOAEL 0.004 mg/l    | 3 hours                |
| Toluene   | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  | Human                   | NOAEL Not available | poisoning and/or abuse |
| Propane   | Inhalation | cardiac sensitisation             | Causes damage to organs  | Human                   | NOAEL Not available |                        |
| Propane   | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human                   | NOAEL Not available |                        |
| Propane   | Inhalation | respiratory irritation            | Not classified   | Human                   | NOAEL Not available |                        |
| Isobutane | Inhalation | cardiac sensitisation             | Causes damage to organs  | Multiple animal species | NOAEL Not available |                        |
| Isobutane | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human and animal        | NOAEL Not available |                        |
| Isobutane | Inhalation | respiratory irritation            | Not classified   | Mouse                   | NOAEL Not available |                        |
| Butane    | Inhalation | cardiac sensitisation             | Causes damage to organs  | Human                   | NOAEL Not available |                        |
| Butane    | Inhalation | central nervous system depression | May cause drowsiness or dizziness  | Human and animal        | NOAEL Not available |                        |
| Butane    | Inhalation | heart                             | Not classified   | Dog                     | NOAEL               | 25 minutes             |

**3M 05917 Polyolefin Adhesion Promoter Aerosol**

|        |            |                        |                |        |                     |  |
|--------|------------|------------------------|----------------|--------|---------------------|--|
|        |            |                        |                |        | 5,000 ppm           |  |
| Butane | Inhalation | respiratory irritation | Not classified | Rabbit | NOAEL Not available |  |

**Specific Target Organ Toxicity - repeated exposure**

| Name      | Route      | Target Organ(s)  | Value  | Species                 | Test result           | Exposure Duration      |
|-----------|------------|--|--|-------------------------|-----------------------|------------------------|
| Toluene   | Inhalation | auditory system   nervous system   eyes   olfactory system | Causes damage to organs through prolonged or repeated exposure               | Human                   | NOAEL Not available   | poisoning and/or abuse |
| Toluene   | Inhalation | respiratory system   | Some positive data exist, but the data are not sufficient for classification | Rat                     | LOAEL 2.3 mg/l        | 15 months              |
| Toluene   | Inhalation | heart   liver   kidney and/or bladder                      | Not classified   | Rat                     | NOAEL 11.3 mg/l       | 15 weeks               |
| Toluene   | Inhalation | endocrine system   | Not classified   | Rat                     | NOAEL 1.1 mg/l        | 4 weeks                |
| Toluene   | Inhalation | immune system  | Not classified   | Mouse                   | NOAEL Not available   | 20 days                |
| Toluene   | Inhalation | bone, teeth, nails, and/or hair                            | Not classified   | Mouse                   | NOAEL 1.1 mg/l        | 8 weeks                |
| Toluene   | Inhalation | hematopoietic system   vascular system                     | Not classified   | Human                   | NOAEL Not available   | occupational exposure  |
| Toluene   | Inhalation | gastrointestinal tract                                     | Not classified   | Multiple animal species | NOAEL 11.3 mg/l       | 15 weeks               |
| Toluene   | Ingestion  | nervous system   | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 625 mg/kg/day   | 13 weeks               |
| Toluene   | Ingestion  | heart  | Not classified   | Rat                     | NOAEL 2,500 mg/kg/day | 13 weeks               |
| Toluene   | Ingestion  | liver   kidney and/or bladder                              | Not classified   | Multiple animal species | NOAEL 2,500 mg/kg/day | 13 weeks               |
| Toluene   | Ingestion  | hematopoietic system                                       | Not classified   | Mouse                   | NOAEL 600 mg/kg/day   | 14 days                |
| Toluene   | Ingestion  | endocrine system   | Not classified   | Mouse                   | NOAEL 105 mg/kg/day   | 28 days                |
| Toluene   | Ingestion  | immune system  | Not classified   | Mouse                   | NOAEL 105 mg/kg/day   | 4 weeks                |
| Isobutane | Inhalation | kidney and/or bladder                                      | Not classified   | Rat                     | NOAEL 4,500 ppm       | 13 weeks               |
| Butane    | Inhalation | kidney and/or bladder   blood                              | Not classified   | Rat                     | NOAEL 4,489 ppm       | 90 days                |

**Aspiration Hazard**

| Name    | Value             |
|---------|-------------------|
| Toluene | Aspiration hazard |

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

**SECTION 12: Ecological information**

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**

**3M 05917 Polyolefin Adhesion Promoter Aerosol**

No product test data available.

| Material  | CAS #    | Organism    | Type  | Exposure | Test endpoint | Test result |
|-----------|----------|-------------|---|----------|---------------|-------------|
| Toluene   | 108-88-3 | Coho Salmon | Experimental  | 96 hours | LC50          | 5.5 mg/l    |
| Toluene   | 108-88-3 | Fish other  | Experimental  | 96 hours | LC50          | 6.41 mg/l   |
| Toluene   | 108-88-3 | Green Algae | Experimental  | 72 hours | EC50          | 12.5 mg/l   |
| Toluene   | 108-88-3 | Water flea  | Experimental  | 48 hours | EC50          | 3.78 mg/l   |
| Toluene   | 108-88-3 | Coho salmon | Experimental  | 40 days  | NOEC          | 1.39 mg/l   |
| Toluene   | 108-88-3 | Water flea  | Experimental  | 7 days   | NOEC          | 0.74 mg/l   |
| Propane   | 74-98-6  |             | Data not available or insufficient for classification |          |               |             |
| Butane    | 106-97-8 |             | Data not available or insufficient for classification |          |               |             |
| Isobutane | 75-28-5  |             | Data not available or insufficient for classification |          |               |             |

**12.2. Persistence and degradability**

| Material  | CAS Nbr  | Test type                   | Duration | Study Type                    | Test result       | Protocol      |
|-----------|----------|-----------------------------|----------|-------------------------------|-------------------|---------------|
| Toluene   | 108-88-3 | Experimental Photolysis     |          | Photolytic half-life (in air) | 5.2 days (t 1/2)  | Other methods |
| Toluene   | 108-88-3 | Experimental Biodegradation | 20 days  | BOD                           | 80 % weight       |               |
| Propane   | 74-98-6  | Experimental Photolysis     |          | Photolytic half-life (in air) | 27.5 days (t 1/2) | Other methods |
| Butane    | 106-97-8 | Experimental Photolysis     |          | Photolytic half-life (in air) | 12.3 days (t 1/2) | Other methods |
| Isobutane | 75-28-5  | Experimental Photolysis     |          | Photolytic half-life (in air) | 13.4 days (t 1/2) | Other methods |

**12.3 : Bioaccumulative potential**

| Material  | Cas No.  | Test type                     | Duration | Study Type | Test result | Protocol      |
|-----------|----------|-------------------------------|----------|------------|-------------|---------------|
| Toluene   | 108-88-3 | Experimental Bioconcentration |          | Log Kow    | 2.73        | Other methods |
| Propane   | 74-98-6  | Experimental Bioconcentration |          | Log Kow    | 2.36        | Other methods |
| Butane    | 106-97-8 | Experimental Bioconcentration |          | Log Kow    | 2.89        | Other methods |
| Isobutane | 75-28-5  | Experimental Bioconcentration |          | Log Kow    | 2.76        | Other methods |

**12.4. Mobility in soil**

Please contact manufacturer for more details

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

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

**12.6. Other adverse effects**

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

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

Incinerate in a permitted waste incineration facility. 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)

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-2080-6025-8

**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

| <u>Ingredient</u> | <u>CAS Nbr</u> | <u>Classification</u>   | <u>Regulation</u>                           |
|-------------------|----------------|-------------------------|---|
| Toluene           | 108-88-3       | Gr. 3: Not classifiable | International Agency for Research on Cancer |

#### Global inventory status

Contact 3M for more information.

### 15.2. Chemical Safety Assessment

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

## SECTION 16: Other information

### List of relevant H statements

|      |                              |
|------|------------------------------|
| H220 | Extremely flammable gas.     |
| H222 | Extremely flammable aerosol. |

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|       |  |
|-------|--|
| 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.                                 |
| H361d | Suspected of damaging the unborn child.                            |
| H373  | May cause damage to organs through prolonged or repeated exposure. |
| H412  | Harmful to aquatic life with long lasting effects.                 |

**Revision information:**

Industrial Application of Coatings: Section 16: Annex information was deleted.  
 Industrial Use of Coatings: Section 16: Annex information was added.  
 Professional Application of Coatings: Section 16: Annex information was deleted.  
 Professional Use of Coatings: Section 16: Annex information was added.  
 Section 5: Fire - Advice for fire fighters information information was modified.  
 Section 8: Eye/face protection information information was modified.  
 Section 8: Personal Protection - Skin/body information information was deleted.  
 Section 8: Skin protection - protective clothing information information was deleted.  
 Section 11: Health Effects - Inhalation information information was modified.  
 Section 11: Target Organs - Repeated Table information was modified.  
 Section 12: Component ecotoxicity information information was modified.  
 Section 12: No PBT/vPvB information available warning information was modified.  
 Section 12: Persistence and Degradability information information was modified.  
 Section 13: 13.1. Waste disposal note information was modified.  
 Section 13: Standard Phrase Category Waste GHS information was modified.  
 Section 15: Chemical Safety Assessment information was modified.

**Annex**

|   |   |
|---|---|
| <b>1. Title</b>   |   |
| <b>Substance identification</b>                               | Toluene;<br>EC No. 203-625-9;<br>CAS Nbr 108-88-3;  |
| <b>Exposure Scenario Name</b>                                 | Industrial Use of Coatings  |
| <b>Lifecycle Stage</b>  | Use at industrial sites   |
| <b>Contributing activities</b>                                | PROC 03 -Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition<br>PROC 07 -Industrial spraying<br>PROC 08a -Transfer of substance or mixture (charging and discharging) at non-dedicated facilities<br>PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing)<br>PROC 10 -Roller application or brushing<br>ERC 04 -Use of non-reactive processing aid at industrial site (no inclusion into or onto article) |
| <b>Processes, tasks and activities covered</b>                | Application of product with a roller or brush. Manual application of product. Spraying of substances/mixtures. Transfers with dedicated controls, including loading, filling, dumping, bagging. Transfers without dedicated controls, including loading, filling, dumping, bagging.   |
| <b>2. Operational conditions and risk management measures</b> |   |
| <b>Operating Conditions</b>                                   | <b>Physical state:</b> Liquid.  |

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|                                  |   |
|----------------------------------|---|
|                                  | <p><b>General operating conditions:</b><br/>Assumes use at not more than 20°C above ambient temperature;<br/>Duration of exposure per day at workplace [for one worker]: 8 hours/day;<br/>Duration of use: 5 days/week;<br/>Emission days per year: 300 days/year;</p>  |
| <b>Risk management measures</b>  | <p>Under the operational conditions described above the following risk management measures apply:<br/><b>General risk management measures:</b><br/><b>Human health:</b><br/>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour);<br/><b>Environmental:</b><br/>Air abatement;<br/>Industrial Sewage Treatment Plant;<br/>;<br/>The following task-specific risk management measures apply in addition to those listed above:<br/><b>Task: Spraying;</b><br/><b>Human Health;</b><br/>Ventilated Process Enclosures;<br/>Air-purifying Full-Face (with gas/vapour cartridge, that can be combined with a particulate filter);</p> |
| <b>Waste management measures</b> | Do not apply industrial sludge to natural soils;  |
| <b>3. Prediction of exposure</b> |   |
| <b>Prediction of exposure</b>    | Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.  |

|   |  |
|---|--|
| <b>1. Title</b>   |  |
| <b>Substance identification</b>                               | Toluene;<br>EC No. 203-625-9;<br>CAS Nbr 108-88-3;   |
| <b>Exposure Scenario Name</b>                                 | Professional Use of Coatings   |
| <b>Lifecycle Stage</b>  | Widespread use by professional workers   |
| <b>Contributing activities</b>                                | PROC 05 -Mixing or blending in batch processes<br>PROC 10 -Roller application or brushing<br>PROC 11 -Non industrial spraying<br>ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)   |
| <b>Processes, tasks and activities covered</b>                | Application of product. Mixing or blending of solid or liquid materials.   |
| <b>2. Operational conditions and risk management measures</b> |  |
| <b>Operating Conditions</b>                                   | <p><b>Physical state:</b>Liquid.<br/><b>General operating conditions:</b><br/>Assumes use at not more than 20°C above ambient temperature;<br/>Duration of exposure per day at workplace [for one worker]: 8 hours/day;<br/>Emission days per year: 365 days/year;<br/>Outdoor use;</p>  |
| <b>Risk management measures</b>                               | <p>Under the operational conditions described above the following risk management measures apply:<br/><b>General risk management measures:</b><br/><b>Human health:</b><br/>Air-purifying Full-Face (with gas/vapour cartridge, that can be combined with a particulate filter);<br/>Air-purifying Half-Mask (with gas/vapour-cartridge, that can be combined with a particulate filter) (APF 10);</p> |

**3M 05917 Polyolefin Adhesion Promoter Aerosol**

|                                  |  |
|----------------------------------|--|
|                                  | Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour);<br>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Refer to Section 8 of the SDS for specific glove material.;<br><b>Environmental:</b><br>Municipal Sewage Treatment Plant; |
| <b>Waste management measures</b> | No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:  |
| <b>3. Prediction of exposure</b> |  |
| <b>Prediction of exposure</b>    | 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](http://www.3M.com/uk)**