

## **Safety Data Sheet**

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### **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> Hi-Strength Spray Adhesive 90 (aerosol)

#### **Product Identification Numbers**

62-4942-4730-7, 62-4942-4920-4, 62-4942-4921-2, 62-4942-4922-0, 62-4942-4925-3, 62-4942-4930-3, 62-4942-4935-2, 62-4942-4950-1, 62-4942-4955-0, 62-4942-4970-9, 62-4942-4975-8, CS-0406-7111-0

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

#### Recommended use

Aerosol adhesive. Recommended for industrial and professional use., hi-strength aerosol adhesive

1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Industrial Adhesives and Tapes Division ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA Telephone: 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

# **SECTION 2: Hazard identification**

### 2.1. Hazard classification

Flammable Aerosol: Category 1. Gas Under Pressure: Liquefied gas.

Serious Eye Damage/Irritation: Category 2B.

Simple Asphyxiant.

Specific Target Organ Toxicity (single exposure): Category 1.

Specific Target Organ Toxicity (central nervous system): Category 3.

Specific Target Organ Toxicity (respiratory irritation): Category 3.

#### 2.2. Label elements

### Signal word

Danger

## Symbols

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Flame | Gas cylinder | Exclamation mark | Health Hazard |

#### **Pictograms**



#### **Hazard Statements**

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes eye irritation.

May cause respiratory irritation.

May cause drowsiness or dizziness.

May displace oxygen and cause rapid suffocation.

Causes damage to organs:

cardiovascular system |

#### **Precautionary Statements**

#### General:

Keep out of reach of children.

#### **Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

#### **Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF exposed: Call a POISON CENTER or doctor/physician.

Specific treatment (see Notes to Physician on this label).

#### Storage:

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.

Keep container tightly closed.

Store locked up in a well-ventilated place.

#### Disposal:

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

#### **Notes to Physician:**

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

#### 2.3. Hazards not otherwise classified

Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal.

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

| Ingredient   | C.A.S. No.    | % by Wt                |
|--|---------------|------------------------|
| Dimethyl ether   | 115-10-6      | 35 - 45 Trade Secret * |
| Methyl acetate   | 79-20-9       | 25 - 35 Trade Secret * |
| Nonvolatile components (N.J.T.S. Reg. No. 0449960-6448P) | Trade Secret* | 10 - 20 Trade Secret * |
| Cyclohexane  | 110-82-7      | 7 - 13 Trade Secret *  |
| 1,1-Difluoroethane                                       | 75-37-6       | 1 - 5 Trade Secret *   |
| Pentane  | 109-66-0      | 1 - 5 Trade Secret *   |

<sup>\*</sup>The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **Inhalation:**

Remove person to fresh air. Get medical attention.

#### **Skin Contact:**

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

#### **Eve 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. Suitable 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**

SubstanceConditionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionIrritant Vapors or GasesDuring Combustion

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

No special protective actions for fire-fighters are anticipated.

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### **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. 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. Close cylinder. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

### **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/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing 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 oxidizing agents.

# **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

### Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component

| Ingredient         | C.A.S. No. | Agency | Limit type               | <b>Additional Comments</b> |
|--------------------|------------|--------|--------------------------|----------------------------|
| Pentane            | 109-66-0   | ACGIH  | TWA:1000 ppm             |                            |
| Pentane            | 109-66-0   | OSHA   | TWA:2950 mg/m3(1000 ppm) |                            |
| Cyclohexane        | 110-82-7   | ACGIH  | TWA:100 ppm              |                            |
| Cyclohexane        | 110-82-7   | OSHA   | TWA:1050 mg/m3(300 ppm)  |                            |
| Dimethyl ether     | 115-10-6   | AIHA   | TWA:1880 mg/m3(1000 ppm) |                            |
| Dimethyl ether     | 115-10-6   | CMRG   | TWA:1000 ppm             |                            |
| 1,1-Difluoroethane | 75-37-6    | AIHA   | TWA:2700 mg/m3(1000 ppm) |                            |
| 1,1-Difluoroethane | 75-37-6    | CMRG   | TWA:1000 ppm             |                            |
| Methyl acetate     | 79-20-9    | ACGIH  | TWA:200 ppm;STEL:250 ppm |                            |
| Methyl acetate     | 79-20-9    | OSHA   | TWA:610 mg/m3(200 ppm)   |                            |

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

#### 8.2. Exposure controls

#### 8.2.1. Engineering controls

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/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

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

#### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

**Indirect Vented Goggles** 

#### Skin/hand protection

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

Gloves made from the following material(s) are recommended: Butyl Rubber

Nitrile Rubber

#### Respiratory protection

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

Half facepiece or full facepiece supplied-air respirator

Organic vapor respirators may have short service life.

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

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

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

General Physical Form:

Specific Physical Form:

Gas

Aerosol

Odor, Color, Grade:clear, sweet fruity odorOdor thresholdNo Data AvailablepHNo Data AvailableMelting pointNot ApplicableBoiling PointNot Applicable

**Flash Point** -42.00 °F [*Test Method:* Tagliabue Closed Cup]

**Evaporation rate**1.9 [*Ref Std:* ETHER=1] **Flammability (solid, gas)**Flammable Aerosol: Category 1.

Flammable Limits(LEL)

Flammable Limits(UEL)

Vapor Density

No Data Available
No Data Available
2.97 [Ref Std: AIR=1]

**Density** 0.726 g/ml

Specific Gravity 0.726 [Ref Std: WATER=1]

Solubility in Water Nil

Solubility- non-water

No Data Available

Partition coefficient: n-octanol/ water

No Data Available

No Data Available **Autoignition temperature Decomposition temperature** Not Applicable Not Applicable Viscosity

**Hazardous Air Pollutants** <=0 % weight [Test Method: Calculated]

Molecular weight No Data Available

**VOC Less H2O & Exempt Solvents** <=55 % [Test Method: calculated per CARB title 2]

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

#### 10.1. Reactivity

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

#### 10.2. Chemical stability

Stable.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

Heat

#### 10.5. Incompatible materials

Strong oxidizing agents

#### 10.6. Hazardous decomposition products

**Substance** 

None known.

**Condition** 

Refer to section 5.2 for hazardous decomposition products during combustion.

### **SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

#### **Inhalation:**

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:**

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

#### **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 diarrhea.

May cause additional health effects (see below).

#### **Additional Health Effects:**

### Single exposure may cause target organ effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Single exposure, above recommended guidelines, may cause:

Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

#### **Toxicological Data**

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

**Acute Toxicity** 

| Name   | Route                             | Species | Value   |
|--|-----------------------------------|---------|---|
| Overall product  | Dermal                            |         | No data available; calculated ATE > 5,000 mg/kg |
| Overall product  | Inhalation-<br>Vapor(4 hr)        |         | No data available; calculated ATE > 50 mg/l     |
| Overall product  | Ingestion                         |         | No data available; calculated ATE > 5,000 mg/kg |
| Dimethyl ether   | Inhalation-<br>Gas (4<br>hours)   | Rat     | LC50 164,000 ppm                                |
| Methyl acetate   | Dermal                            | Rat     | LD50 > 2,000 mg/kg                              |
| Methyl acetate   | Inhalation-<br>Vapor (4<br>hours) | Rat     | LC50 > 49 mg/l                                  |
| Methyl acetate   | Ingestion                         | Rat     | LD50 > 5,000 mg/kg                              |
| Cyclohexane  | Dermal                            | Rat     | LD50 > 2,000 mg/kg                              |
| Cyclohexane  | Inhalation-<br>Vapor (4<br>hours) | Rat     | LC50 > 32.9 mg/l                                |
| Cyclohexane  | Ingestion                         | Rat     | LD50 6,200 mg/kg                                |
| Nonvolatile components (N.J.T.S. Reg. No. 0449960-6448P) | Dermal                            |         | LD50 estimated to be > 5,000 mg/kg              |
| Nonvolatile components (N.J.T.S. Reg. No. 0449960-6448P) | Ingestion                         | Rat     | LD50 > 34,000 mg/kg                             |
| Pentane  | Dermal                            | Rabbit  | LD50 3,000 mg/kg                                |
| Pentane  | Inhalation-<br>Vapor (4<br>hours) | Rat     | LC50 > 18 mg/l                                  |
| Pentane  | Ingestion                         | Rat     | LD50 > 2,000 mg/kg                              |
| 1,1-Difluoroethane                                       | Inhalation-<br>Gas (4<br>hours)   | Rat     | LC50 > 437,000 ppm                              |
| 1,1-Difluoroethane                                       | Ingestion                         | Rat     | LD50 > 1,500 mg/kg                              |

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

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| Methyl acetate | Rabbit | No significant irritation |
|----------------|--------|---------------------------|
| Cyclohexane    | Rabbit | Mild irritant             |
| Pentane        | Rabbit | Minimal irritation        |

**Serious Eye Damage/Irritation** 

| Name           | Species | Value             |
|----------------|---------|-------------------|
| Methyl acetate | Rabbit  | Moderate irritant |
| Cyclohexane    | Rabbit  | Mild irritant     |
| Pentane        | Rabbit  | Mild irritant     |

### **Skin Sensitization**

| Name           | Species | Value           |
|----------------|---------|-----------------|
| Methyl acetate | Human   | Not sensitizing |
| Pentane        | Guinea  | Not sensitizing |
|                | nig     |                 |

### **Respiratory Sensitization**

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

Germ Cell Mutagenicity

| Name               | Route    | Value  |  |  |
|--------------------|----------|--|--|--|
|                    |          |  |  |  |
| Dimethyl ether     | In Vitro | Not mutagenic  |  |  |
| Dimethyl ether     | In vivo  | Not mutagenic  |  |  |
| Methyl acetate     | In Vitro | Not mutagenic  |  |  |
| Methyl acetate     | In vivo  | Not mutagenic  |  |  |
| Cyclohexane        | In Vitro | Not mutagenic  |  |  |
| Cyclohexane        | In vivo  | Some positive data exist, but the data are not sufficient for classification |  |  |
| Pentane            | In vivo  | Not mutagenic  |  |  |
| Pentane            | In Vitro | Some positive data exist, but the data are not sufficient for classification |  |  |
| 1,1-Difluoroethane | In Vitro | Some positive data exist, but the data are not sufficient for classification |  |  |
| 1,1-Difluoroethane | 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   |
| 1,1-Difluoroethane | Inhalation | Rat     | Some positive data exist, but the data are not sufficient for classification |

### **Reproductive Toxicity**

Reproductive and/or Developmental Effects

| Name           | Route      | Value  | Species | Test Result              | Exposure<br>Duration        |
|----------------|------------|--|---------|--------------------------|-----------------------------|
| Dimethyl ether | Inhalation | Not toxic to development   | Rat     | NOAEL<br>40,000 ppm      | during<br>organogenesi<br>s |
| Cyclohexane    | Inhalation | Not toxic to female reproduction   | Rat     | NOAEL 24<br>mg/l         | 2 generation                |
| Cyclohexane    | Inhalation | Not toxic to male reproduction   | Rat     | NOAEL 24<br>mg/l         | 2 generation                |
| Cyclohexane    | Inhalation | Some positive developmental data exist,<br>but the data are not sufficient for<br>classification | Rat     | NOAEL 6.9<br>mg/l        | 2 generation                |
| Pentane        | Ingestion  | Not toxic to development   | Rat     | NOAEL 1,000<br>mg/kg/day | during<br>organogenesi      |

|                    |            |                          |     |            | S            |
|--------------------|------------|--------------------------|-----|------------|--------------|
| Pentane            | Inhalation | Not toxic to development | Rat | NOAEL 30   | during .     |
|                    |            |                          |     | mg/l       | organogenesi |
|                    |            |                          |     |            | S            |
| 1,1-Difluoroethane | Inhalation | Not toxic to development | Rat | NOAEL      | during       |
|                    |            |                          |     | 50,000 ppm | organogenesi |
|                    |            |                          |     |            | S            |

# Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

| Name               | Route      | Target Organ(s)                      | Value  | Species                           | Test Result            | Exposure<br>Duration      |
|--------------------|------------|--------------------------------------|--|-----------------------------------|------------------------|---------------------------|
| Dimethyl ether     | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Rat                               | LOAEL<br>10,000 ppm    | 30 minutes                |
| Dimethyl ether     | Inhalation | cardiac sensitization                | Some positive data exist, but the data are not sufficient for classification | Dog                               | NOAEL<br>100,000 ppm   | 5 minutes                 |
| Methyl acetate     | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Human<br>and<br>animal            | NOAEL Not<br>available |                           |
| Methyl acetate     | Inhalation | respiratory irritation               | May cause respiratory irritation   | Human<br>and<br>animal            | NOAEL Not<br>available |                           |
| Methyl acetate     | Inhalation | blindness                            | Some positive data exist, but the data are not sufficient for classification |                                   | NOAEL Not<br>available |                           |
| Methyl acetate     | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  |                                   | NOAEL Not available    |                           |
| Cyclohexane        | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Human<br>and<br>animal            | NOAEL Not<br>available |                           |
| Cyclohexane        | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | Human<br>and<br>animal            | NOAEL Not<br>available |                           |
| Cyclohexane        | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  | Professio<br>nal<br>judgeme<br>nt | NOAEL Not<br>available |                           |
| Pentane            | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Multiple<br>animal<br>species     | NOAEL Not<br>available | not available             |
| Pentane            | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | Not<br>available                  | NOAEL Not<br>available | not available             |
| Pentane            | Inhalation | cardiac sensitization                | Some positive data exist, but the data are not sufficient for classification | Dog                               | NOAEL Not<br>available | not available             |
| Pentane            | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  | Professio<br>nal<br>judgeme<br>nt | NOAEL Not<br>available | not available             |
| 1,1-Difluoroethane | Inhalation | cardiac sensitization                | Causes damage to organs  | Human<br>and<br>animal            | NOAEL Not<br>available | poisoning<br>and/or abuse |
| 1,1-Difluoroethane | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Human<br>and<br>animal            | NOAEL<br>100,000 ppm   |                           |
| 1,1-Difluoroethane | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | Not<br>available                  | NOAEL Not<br>available | not available             |

**Specific Target Organ Toxicity - repeated exposure** 

| Specific Target Organ Toxicity - Tepeated exposure |            |                 |                                   |         |             |                      |  |  |
|--|------------|-----------------|-----------------------------------|---------|-------------|----------------------|--|--|
| Name   | Route      | Target Organ(s) | Value                             | Species | Test Result | Exposure<br>Duration |  |  |
| Dimethyl ether                                     | Inhalation | hematopoietic   | Some positive data exist, but the | Rat     | NOAEL       | 2 years              |  |  |

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|                    |            | system  | data are not sufficient for  |        | 25,000 ppm                  |                       |
|--------------------|------------|---|--|--------|-----------------------------|-----------------------|
|                    |            | ,   | classification   |        |                             |                       |
| Dimethyl ether     | Inhalation | liver   | Some positive data exist, but the data are not sufficient for classification | Rat    | NOAEL<br>20,000 ppm         | 30 weeks              |
| Methyl acetate     | Inhalation | respiratory system  | Some positive data exist, but the data are not sufficient for classification | Rat    | NOAEL 1.1<br>mg/l           | 28 days               |
| Methyl acetate     | Inhalation | endocrine system  <br>hematopoietic<br>system   liver  <br>immune system  <br>kidney and/or<br>bladder  | Some positive data exist, but the data are not sufficient for classification | Rat    | NOAEL 6.1<br>mg/l           | 28 days               |
| Cyclohexane        | Inhalation | liver   | Some positive data exist, but the data are not sufficient for classification | Rat    | NOAEL 24<br>mg/l            | 90 days               |
| Cyclohexane        | Inhalation | auditory system   | Some positive data exist, but the data are not sufficient for classification | Rat    | NOAEL 1.7<br>mg/l           | 90 days               |
| Cyclohexane        | Inhalation | kidney and/or<br>bladder  | Some positive data exist, but the data are not sufficient for classification | Rabbit | NOAEL 2.7<br>mg/l           | 10 weeks              |
| Cyclohexane        | Inhalation | hematopoietic<br>system   | Some positive data exist, but the data are not sufficient for classification | Mouse  | NOAEL 24<br>mg/l            | 14 weeks              |
| Cyclohexane        | Inhalation | peripheral nervous<br>system  | All data are negative  | Rat    | NOAEL 8.6<br>mg/l           | 30 weeks              |
| Pentane            | Inhalation | peripheral nervous<br>system  | Some positive data exist, but the data are not sufficient for classification | Human  | NOAEL Not<br>available      | occupational exposure |
| 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<br>mg/l            | 13 weeks              |
| Pentane            | Ingestion  | kidney and/or<br>bladder  | All data are negative  | Rat    | NOAEL<br>2,000<br>mg/kg/day | 28 days               |
| 1,1-Difluoroethane | Inhalation | hematopoietic<br>system   kidney<br>and/or bladder  <br>respiratory system  | Some positive data exist, but the data are not sufficient for classification | Rat    | NOAEL<br>25,000 ppm         | 2 years               |

#### **Aspiration Hazard**

| Topi woon 11 man 4 |                   |  |  |  |
|--------------------|-------------------|--|--|--|
| Name               | Value             |  |  |  |
| Cyclohexane        | Aspiration hazard |  |  |  |
| Pentane            | Aspiration hazard |  |  |  |

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

# **SECTION 12: Ecological information**

### **Ecotoxicological information**

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

#### **Chemical fate information**

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

### **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. The facility should be equipped to handle gaseous waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

### **SECTION 14: Transport Information**

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

## **SECTION 15: Regulatory information**

#### 15.1. US Federal Regulations

Contact 3M for more information.

#### 311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

**Ingredient** C.A.S. No % by Wt Cyclohexane Trade Secret 7 - 13

#### 15.2. State Regulations

Contact 3M for more information.

### **15.3.** Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

#### 15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### **SECTION 16: Other information**

NFPA Hazard Classification

Health: 2 Flammability: 4 Instability: 0 Special Hazards: None

Aerosol Storage Code: 3

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

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