# SAFETY DATA SHEET

according to Regulation (EU) No. 453/2010

### STM 835

# 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product code** 1114.001

Synonyms STM 835

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

| Use of the            | Pharmaceutical release agent spray |
|-----------------------|------------------------------------|
| Substance/Preparation |                                    |

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

| Company/Undertaking<br>Identification | SILITECH AG<br>Worbstrasse 173<br>CH-3073 Gümlingen<br>Schweiz/Switzerland<br>Tel +41 31 398 50 70<br>Fax +41 31 398 50 80<br>info@silitech.ch |
|---------------------------------------|--|
| 1.4. Emergency telephone number       | +41 44 251 51 51 (Tox Center)  |
| Issuing date                          | 03.06.2014   |
| Version                               | GHS 1.0  |

# 2. Hazards identification

| 2.1. Classification of the substance or mixture                           |  |  |
|---|--|--|
| Classification according to<br>Regulation (EC) No. 1272/2008<br>(GHS/CLP) | Aerosols, Cat. 1, H222 H229  |  |
| Classification according to EU<br>Directives 67/548/EEC or<br>1999/45/EC  | F+; R12  |  |
| Additional information<br>2.2. Label elements                             | For the full text of the phrases mentioned in this Section, see Section 16.  |  |
|   |  |  |
| Signal Word   | Danger   |  |
| Hazard Statements   | H222: Extremely flammable aerosol.<br>H229: Pressurised container: May burst if heated.  |  |
| Precautionary statements  | <ul> <li>P102: Keep out of reach of children.</li> <li>P210b: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P211: Do not spray on an open flame or other ignition source.</li> <li>P251: Do not pierce or burn, even after use.</li> <li>P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.</li> </ul> |  |
| Additional advice   | None.  |  |
| GHS product identifier  | Isobutan, CAS-No. 75-28-5, EC-No. 200-857-2<br>Propane, CAS-No. 74-98-6, EC-No. 200-827-9<br>Butane, CAS-No. 106-97-8, EC-No. 203-448-7  |  |

### Labelling according to Directives 67/548/EEC or 1999/45/EC

|  | F+ - Extremely flammable.  |
|--|--|
| R-phrase(s)  | R12: Extremely flammable.  |
| S-phrase(s)  | S9: Keep container in a well-ventilated place.<br>S16: Keep away from sources of ignition - No smoking.<br>S33: Take precautionary measures against static discharges. |
| Hazardous component(s) which must be listed on the label | None.  |
| 2.3. Other hazards                                       | No information available.  |

### 3. Composition/information on ingredients

### Chemical characterization

Low-viscosity silicone oil Silbione ${\ensuremath{\mathbb B}}$  for the food and cosmetic industry

| Components          |              | CLP Classification                               | DSD/DPD<br>Classification | Product identifier   |
|---------------------|--------------|--|---------------------------|--|
| Polydimethylsiloxan | 5% -<br>10%  |  |                           | CAS-No.: 63148-62-9  |
| Isobutan            | 75% -<br>90% | Flam. Gas 1 H220, Press.<br>Gas H280             | F+; R-12                  | CAS-No.: 75-28-5<br>EC-No.: 200-857-2                            |
| Propane             | 5% -<br>10%  | Flam. Gas 1 H220, Press.<br>Gas H280 , Notes U   | F+; R-12                  | CAS-No.: 74-98-6<br>EC-No.: 200-827-9<br>Index-No: 601-003-00-5  |
| Butane              | 2.5% -<br>5% | Flam. Gas 1 H220, Press.<br>Gas H280 , Notes C U | F+; R-12, Notes C         | CAS-No.: 106-97-8<br>EC-No.: 203-448-7<br>Index-No: 601-004-00-0 |

For the full text of the phrases mentioned in this Section, see Section 16.

#### Hazardous impurities

None known.

### 4. First aid measures

#### 4.1. Description of first aid measures

| Inhalation  | Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.                      |
|---|--|
| Skin contact  | Wash with water and soap as a precaution. If skin irritation persists, call a physician.                         |
| Eye contact   | Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist. |
| Ingestion   | Obtain medical attention.  |
| 4.2. Most important symptoms<br>and effects, both acute and<br>delayed          | None known.  |
| 4.3. Indication of any immediate medical attention and special treatment needed | None known.  |

### 5. Firefighting measures

| 5.1. Extinguishing media                                      |  |
|---|--|
| Suitable extinguishing media                                  | Use dry chemical, CO2, water spray or alcohol foam.  |
| Extinguishing media which must not be used for safety reasons | High volume water jet.   |
| 5.2. Special hazards arising from the substance or mixture    | Closed containers may explode due to pressure build-up when<br>subjected to excessive heat or intense fire. Collect contaminated<br>fire extinguishing water separately. This must not be discharged<br>into drains. |
| 5.3. Advice for firefighters                                  |  |
| Special protective equipment for firefighters                 | Standard procedure for chemical fires. In the event of fire, wear self-contained breathing apparatus. In the event of fire and/or explosion do not breathe fumes. Wear protective suit.                              |
| Specific methods  | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water mist may be used to cool closed containers.  |

### 6. Accidental release measures

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

| Advice for non-emergency personnel                           | Use personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapours/dust. Remove all sources of ignition. Pay attention to flashback. |
|--|---|
| Advice for emergency responders                              | Immediately evacuate personnel to safe areas. Remove all sources of ignition. Pay attention to flashback. Prevent unauthorised persons entering the zone.     |
| 6.2. Environmental precautions                               | No special environmental precautions required.  |
| 6.3. Methods and material for<br>containment and cleaning up | Keep in suitable and closed containers for disposal.  |
| 6.4. Reference to other sections                             | See chapter 8 and 13.   |

# 7. Handling and storage

| 7.1. Precautions for safe handling                                | Wear personal protective equipment. Keep product and empty<br>container away from heat and sources of ignition. Take<br>precautionary measures against static discharges. |
|---|---|
| 7.2. Conditions for safe storage, including any incompatibilities | Store in a place accessible by authorized persons only. Store in original container.  |

### 8. Exposure controls/personal protection

#### 8.1. Control parameters

| Exposure limit(s)  | No data is available on the product itself.                                    |
|--|--|
| Butane (CAS 106-97-8)<br>United Kingdom - Workplace<br>Exposure Limits (WELs) - STELs<br>United Kingdom - Workplace<br>Exposure Limits (WELs) - TWAs | 750 ppm STEL<br>1810 mg/m3 STEL<br>600 ppm TWA<br>1450 mg/m3 TWA               |
| 8.2. Exposure controls   |  |
| Occupational exposure controls   | Handle in accordance with good industrial hygiene and safety practice.         |
| Personal protection equipment  |  |
| Respiratory protection   | In case of insufficient ventilation wear suitable respiratory equipment.       |
| Hand protection  | Normally none needed. Use gloves if repeated or prolonged contact is expected. |
| Eye protection   | Avoid contact with eyes.   |
| Skin and body protection   | No special measures required.  |
| Thermal hazards  | Keep product and empty container away from heat and sources of ignition.       |
| Environmental exposure controls  | No special measures required   |

Environmental exposure controls No special measures required.

# 9. Physical and chemical properties

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

| Form<br>Colour<br>Odour<br>Odour Threshold<br>pH:<br>Melting point/range:<br>Boiling point/range:<br>Flash point: | Aerosol.<br>clear to milky emulsion<br>Solvent.<br>No information available.<br>No information available.<br>No information available.<br>No information available.<br>-83 ℃ (CAS 75-28-5) |  |
|---|--|--|
| Evaporation Rate:<br>Flammability:<br>Explosion limits:<br>Vapour pressure:                                       | No information available.<br>highly flammable<br>1,5 Vol.% - 9,4 Vol.% (CAS 75-28-5)<br>No information available.  |  |
| STM 835   | Print Date 03 06 2014  |  |

| Vapor density:<br>Relative density:<br>Water solubility:<br>Partition coefficient (n-<br>octanol/water): | No information available.<br>No information available.<br>No information available.<br>No information available. |
|--|--|
| Autoignition temperature:  | 460 ℃ (CAS 75-28-5)  |
| Decomposition temperature:   | No information available.  |
| Viscosity:   | No information available.  |
| Combustion/explosion hazards:  | flammable aerosol  |
| Oxidizing properties:  | None   |

#### 9.2. Other information

General Product Characteristics No information available.

# 10. Stability and reactivity

| 10.1. Reactivity                         | Risk of ignition.  |
|--|--|
| 10.2. Chemical stability                 | No information available.  |
| 10.3. Possibility of hazardous reactions | Spray mist may be flammable at temperatures below the flash point of the solvents. |
| 10.4. Conditions to avoid                | Take precautionary measures against static discharges. Heat, flames and sparks.    |
| 10.5. Incompatible materials             | None.  |
| 10.6. Hazardous decomposition products   | None reasonably foreseeable.   |

# 11. Toxicological information

### 11.1. Information on toxicological effects

| Acute toxicity                    | No data is available on the product itself.<br><b>Isobutane (CAS 75-28-5)</b><br>Inhalation LC50 Rat = 658 mg/L 4 h (IUCLID)<br><b>Propane (CAS 74-98-6)</b><br>Inhalation LC50 Rat = 658 mg/L 4 h (IUCLID)<br><b>Butane (CAS 106-97-8)</b><br>Inhalation LC50 Rat = 658 g/m3 4 h (NLM_CIP) |
|-----------------------------------|---|
| Skin corrosion/irritation         | None.   |
| Serious eye damage/eye irritation | None.   |
| Respiratory / Skin Sensitisation  | None.   |
| Carcinogenicity                   | Carcinogenicity classification not possible from current data.  |

| Germ cell mutagenicity                             | Classification not possible from current data. |
|--|--|
| Reproductive toxicity                              | Classification not possible from current data. |
| Specific target organ toxicity (single exposure)   | No data available.                             |
| Specific target organ toxicity (repeated exposure) | No data available.                             |
| Aspiration hazard                                  | No data available.                             |
| Human experience                                   | No data available.                             |

# 12. Ecological information

| 12.1. Toxicity                           | No data is available on the product itself. |
|--|---|
| 12.2. Persistence and degradability      | Expected to be biodegradable.               |
| 12.3. Bioaccumulative potential          | Bioaccumulation is unlikely.                |
| 12.4. Mobility in soil                   | No data available.                          |
| 12.5. Results of PBT and vPvB assessment | No information available.                   |
| 12.6. Other adverse effects              | No information available.                   |

# 13. Disposal considerations

| 13.1. Waste treatment methods         |  |
|---------------------------------------|--|
| Waste from residues / unused products | Dispose of in accordance with local regulations. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 40 $^{\circ}$ C. |
| Contaminated packaging                | Dispose of as unused product. Empty pressure vessels should be returned to the supplier.   |

# 14. Transport information

| ADR/RID             | Proper shipping name AEROSOLS, flammable (Isobutan)<br>UN No 1950.<br>Class 2.<br>ADR/RID-Labels 2.1.<br>Classification code 5F.<br>Risk No. 23.<br>Limited quantity 1 L.<br>Tunnel code D  |
|---------------------|---|
| IMDG                | Proper shipping name Aerosols, flammable (Isobutan)<br>UN No 1950.<br>Class 2.<br>Packing group<br>IMDG-Labels 2.1.<br>Limited quantity Siehe SV277.<br>EmS F-D, S-U.<br>Marine Pollutant no  |
| ΙΑΤΑ                | Proper shipping name Aerosols, flammable (Isobutan)<br>UN No 1950.<br>Class 2.1.<br>IATA label 2.1.<br>Packing instruction (passenger aircraft): 203 (75 kg).<br>Packing instruction (LQ): Y203 (30 kg G).<br>Packing instruction (cargo aircraft): 203 (150 kg). |
| Further Information | None.   |

# 15. Regulatory information

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

| Regulatory Information  | The product is classified and labelled according to Regulation (EC) No. 1272/2008 (GHS/CLP).                                       |
|---|--|
| Isobutane (CAS 75-28-5)<br>EU - Cosmetics (1223/2009) -<br>Annex II - Prohibited Substances<br>EU - REACH (1907/2006) - Annex<br>XVII - Restrictions on Certain<br>Dangerous Substances<br>EU - REACH (1907/2006) - List of<br>Registered Substances<br>UN (United Nations) - Selected<br>Volatile Substances Prone to<br>Abuse | Prohibited (containing >=0.1% w/w Butadiene)<br>Use restricted. See item 28.<br>Use restricted. See item 29.<br>Present<br>Present |
| Propane (CAS 74-98-6)<br>EU - REACH (1907/2006) - List of<br>Registered Substances<br>UN (United Nations) - Selected<br>Volatile Substances Prone to<br>Abuse<br>Butane (CAS 106-97-8)  | Present<br>Present   |

| EU - Cosmetics (1223/2009) -<br>Annex II - Prohibited Substances<br>EU - REACH (1907/2006) - Annex<br>XVII - Restrictions on Certain<br>Dangerous Substances<br>EU - REACH (1907/2006) - List of<br>Registered Substances | Prohibited (containing >=0.1% w/w Butadiene)<br>Use restricted. See item 28.<br>Use restricted. See item 29.<br>Present |
|---|---|
| UN (United Nations) - Selected<br>Volatile Substances Prone to<br>Abuse   | Present   |
| 15.2. Chemical safety assessment  | Not required.   |

### 16. Other information

| Key or legend to abbreviations<br>and acronyms             | CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS/CLP)   |
|--|--|
| Key literature references and<br>sources for data          | Information taken from reference works and the literature.   |
| Classification procedure                                   | Calculation method.  |
| Full text of phrases referred to<br>under sections 2 and 3 | H220: Extremely flammable gas.<br>H222 H229<br>H280: Contains gas under pressure; may explode if heated.   |
|  | R12: Extremely flammable.  |
| Further information  | Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 40 °C.  |
| Disclaimer   | The information provided in this Safety Data Sheet is correct to the<br>best of our knowledge, information and belief at the date of its<br>publication. The information given is designed only as a guidance<br>for safe handling, use, processing, storage, transportation, disposal<br>and release and is not to be considered a warranty or quality<br>specification. The information relates only to the specific material<br>designated and may not be valid for such material used in<br>combination with any other materials or in any process, unless<br>specified in the text. |