



## Safety Data Sheet according to Regulation (EC) No 1907/2006

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LOCTITE LB 8021 known as Loctite 8021

SDS No. : 173456  
V003.0

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

#### 1.1. Product identifier

LOCTITE LB 8021 known as Loctite 8021

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

Intended use:

Lubricant

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

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000

Fax-no.: +44 1442 278071

ua-productsafety.uk@henkel.com

#### 1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (CLP):

Aerosols

Category 1

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

Chronic hazards to the aquatic environment

Category 3

H412 Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

##### Label elements (CLP):

##### Hazard pictogram:



##### Signal word:

Danger

|  |  |
|--|--|
| <b>Hazard statement:</b>                       | H222 Extremely flammable aerosol.<br>H229 Pressurised container: May burst if heated.<br>H412 Harmful to aquatic life with long lasting effects.   |
| <b>Precautionary statement:</b>                | P251 Do not pierce or burn, even after use.<br>P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.<br>P211 Do not spray on an open flame or other ignition source.<br>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.<br>No smoking.<br>P102 Keep out of reach of children.<br>"***" ***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements*** |
| <b>Precautionary statement:<br/>Prevention</b> | P273 Avoid release to the environment.   |

### 2.3. Other hazards

The aerosol container is under pressure. Do not expose to high temperatures.  
Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General chemical description:

Silicone Lubricant

#### Declaration of the ingredients according to CLP (EC) No 1272/2008:

| Hazardous components<br>CAS-No.            | EC Number<br>REACH-Reg No.    | content     | Classification  |
|--|-------------------------------|-------------|---|
| Butane, n- (< 0.1 % butadiene)<br>106-97-8 | 203-448-7<br>01-2119474691-32 | 50- < 75 %  | Flam. Gas 1<br>H220<br>Press. Gas   |
| Propane<br>74-98-6                         | 200-827-9<br>01-2119486944-21 | 10- < 25 %  | Flam. Gas 1<br>H220<br>Press. Gas<br>H280   |
| Pentane<br>109-66-0                        | 203-692-4                     | 2,5- < 10 % | Flam. Liq. 2<br>H225<br>Asp. Tox. 1<br>H304<br>STOT SE 3<br>H336<br>Aquatic Chronic 2<br>H411 |

For full text of the H - statements and other abbreviations see section 16 "Other information".  
Substances without classification may have community workplace exposure limits available.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:  
Rinse with running water and soap.  
Seek medical advice.

Eye contact:  
Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion:  
Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.  
Seek medical advice.

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

Prolonged or repeated contact may cause skin irritation.

Prolonged or repeated contact may cause eye irritation.

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

See section: Description of first aid measures

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media:**

Carbon dioxide, foam, powder

**Extinguishing media which must not be used for safety reasons:**

None known

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

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Additional information:**

In case of fire, keep containers cool with water spray.

**SECTION 6: Accidental release measures**

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

Avoid skin and eye contact.

Ensure adequate ventilation.

**6.2. Environmental precautions**

Do not let product enter drains.

**6.3. Methods and material for containment and cleaning up**

For small spills wipe up with paper towel and place in container for disposal.

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

**6.4. Reference to other sections**

See advice in section 8

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Use only in well-ventilated areas.

Vapours should be extracted to avoid inhalation.

Keep away from sources of ignition - no smoking.

Avoid skin and eye contact.

See advice in section 8

## Hygiene measures:

- Good industrial hygiene practices should be observed.
- Do not eat, drink or smoke while working.
- Wash hands before work breaks and after finishing work.

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

- Store in a cool, well-ventilated place.
- Keep away from heat and direct sunlight.
- Refer to Technical Data Sheet

**7.3. Specific end use(s)**

Lubricant

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational Exposure Limits**Valid for  
Great Britain

| Ingredient [Regulated substance] | ppm   | mg/m <sup>3</sup> | Value type                        | Short term exposure limit category / Remarks | Regulatory list |
|----------------------------------|-------|-------------------|-----------------------------------|--|-----------------|
| Butane<br>106-97-8<br>[BUTANE]   | 750   | 1.810             | Short Term Exposure Limit (STEL): |  | EH40 WEL        |
| Butane<br>106-97-8<br>[BUTANE]   | 600   | 1.450             | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Pentane<br>109-66-0<br>[PENTANE] | 600   | 1.800             | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Pentane<br>109-66-0<br>[PENTANE] | 1.000 | 3.000             | Time Weighted Average (TWA):      | Indicative                                   | ECLTV           |

**Occupational Exposure Limits**Valid for  
Ireland

| Ingredient [Regulated substance]   | ppm   | mg/m <sup>3</sup> | Value type                   | Short term exposure limit category / Remarks | Regulatory list |
|------------------------------------|-------|-------------------|------------------------------|--|-----------------|
| Butane<br>106-97-8<br>[BUTANE]     | 1.000 |                   | Time Weighted Average (TWA): |  | IR_OEL          |
| Propane<br>74-98-6<br>[PROPANE]    | 1.000 |                   | Time Weighted Average (TWA): |  | IR_OEL          |
| Pentane<br>109-66-0<br>[N-PENTANE] | 1.000 | 3.000             | Time Weighted Average (TWA): | Indicative OELV                              | IR_OEL          |
| Pentane<br>109-66-0<br>[PENTANE]   | 1.000 | 3.000             | Time Weighted Average (TWA): | Indicative                                   | ECLTV           |

**Biological Exposure Indices:**

None

**8.2. Exposure controls:**

**Respiratory protection:**

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

**Hand protection:**

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR;  $\geq 0.4$  mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR;  $\geq 0.4$  mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

**Eye protection:**

Wear protective glasses.

Protective eye equipment should conform to EN166.

**Skin protection:**

Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

**Advices to personal protection equipment:**

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|  |                                    |
|--|------------------------------------|
| Appearance                                     | aerosol<br>colourless              |
| Odor   | characteristic                     |
| Odour threshold                                | No data available / Not applicable |
| pH   | No data available / Not applicable |
| Melting point                                  | No data available / Not applicable |
| Solidification temperature                     | No data available / Not applicable |
| Initial boiling point                          | -44,5 °C (-48.1 °F)                |
| Flash point                                    | -97 °C (-142.6 °F); None           |
| Evaporation rate                               | No data available / Not applicable |
| Flammability                                   | No data available / Not applicable |
| Explosive limits                               | No data available / Not applicable |
| Vapour pressure                                | No data available / Not applicable |
| Relative vapour density:                       | No data available / Not applicable |
| Density<br>(20,0 °C (68 °F))                   | 0,58 g/cm <sup>3</sup>             |
| Bulk density                                   | No data available / Not applicable |
| Solubility                                     | No data available / Not applicable |
| Solubility (qualitative)<br>(Solvent: Water)   | Insoluble                          |
| Solubility (qualitative)<br>(Solvent: Acetone) | Soluble                            |
| Partition coefficient: n-octanol/water         | No data available / Not applicable |
| Auto-ignition temperature                      | No data available / Not applicable |
| Decomposition temperature                      | No data available / Not applicable |
| Viscosity                                      | No data available / Not applicable |

|                       |                                    |
|-----------------------|------------------------------------|
| Viscosity (kinematic) | No data available / Not applicable |
| Explosive properties  | No data available / Not applicable |
| Oxidising properties  | No data available / Not applicable |

**9.2. Other information**

No data available / Not applicable

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Reacts with strong oxidants.

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

See section reactivity

**10.4. Conditions to avoid**

Stable

**10.5. Incompatible materials**

See section reactivity.

**10.6. Hazardous decomposition products**

Oxides of carbon.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****General toxicological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

**Oral toxicity:**

May cause irritation to the digestive tract.

**Inhalative toxicity:**

May cause irritation to respiratory system.

**Skin irritation:**

Solvent may remove essential oils from the skin making it susceptible to attack from other chemicals.  
Prolonged or repeated contact may cause skin irritation.

**Eye irritation:**

Prolonged or repeated contact may cause eye irritation.

**Acute oral toxicity:**

| Hazardous components<br>CAS-No. | Value<br>type | Value | Route of<br>application | Exposure<br>time | Species | Method |
|---------------------------------|---------------|-------|-------------------------|------------------|---------|--------|
|---------------------------------|---------------|-------|-------------------------|------------------|---------|--------|

**Acute inhalative toxicity:**

| Hazardous components<br>CAS-No.               | Value<br>type | Value        | Route of<br>application | Exposure<br>time | Species | Method        |
|---|---------------|--------------|-------------------------|------------------|---------|---------------|
| Butane, n- (< 0.1 %<br>butadiene)<br>106-97-8 | LC50          | 274200 ppm   | gas                     | 4 h              | rat     | not specified |
| Propane<br>74-98-6                            | LC50          | > 800000 ppm | gas                     | 15 min           | rat     | not specified |

**Acute dermal toxicity:**

| Hazardous components<br>CAS-No. | Value<br>type | Value | Route of<br>application | Exposure<br>time | Species | Method |
|---------------------------------|---------------|-------|-------------------------|------------------|---------|--------|
|---------------------------------|---------------|-------|-------------------------|------------------|---------|--------|

**Skin corrosion/irritation:**

| Hazardous components<br>CAS-No. | Result         | Exposure<br>time | Species | Method   |
|---------------------------------|----------------|------------------|---------|--|
| Pentane<br>109-66-0             | not irritating |                  | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

**Germ cell mutagenicity:**

| Hazardous components<br>CAS-No.               | Result   | Type of study /<br>Route of<br>administration          | Metabolic<br>activation /<br>Exposure time | Species                    | Method   |
|---|----------|--|--|----------------------------|--|
| Butane, n- (< 0.1 %<br>butadiene)<br>106-97-8 | negative | bacterial reverse<br>mutation assay (e.g<br>Ames test) | with and without                           |                            | OECD Guideline 471<br>(Bacterial Reverse Mutation<br>Assay)              |
|   | negative | in vitro mammalian<br>chromosome<br>aberration test    | with and without                           |                            | OECD Guideline 473 (In vitro<br>Mammalian Chromosome<br>Aberration Test) |
| Butane, n- (< 0.1 %<br>butadiene)<br>106-97-8 | negative |  |  | Drosophila<br>melanogaster | not specified  |
| Propane<br>74-98-6                            | negative | bacterial reverse<br>mutation assay (e.g<br>Ames test) | with and without                           |                            | OECD Guideline 471<br>(Bacterial Reverse Mutation<br>Assay)              |
|   | negative | in vitro mammalian<br>chromosome<br>aberration test    | with and without                           |                            | OECD Guideline 473 (In vitro<br>Mammalian Chromosome<br>Aberration Test) |
| Propane<br>74-98-6                            | negative |  |  | Drosophila<br>melanogaster | not specified  |

**Reproductive toxicity:**

| Hazardous substances<br>CAS-No.               | Result / Classification                     | Species | Exposure<br>time | Species | Method  |
|---|---|---------|------------------|---------|---|
| Butane, n- (< 0.1 %<br>butadiene)<br>106-97-8 | NOAEL P = 21,4 mg/l<br>NOAEL F1 = 21,4 mg/l |         |                  | rat     | OECD Guideline 422<br>(Combined Repeated Dose<br>Toxicity Study with the<br>Reproduction /<br>Developmental Toxicity<br>Screening Test) |

**Repeated dose toxicity**

| Hazardous components<br>CAS-No.               | Result | Route of<br>application | Exposure time /<br>Frequency of<br>treatment | Species | Method   |
|---|--------|-------------------------|--|---------|--|
| Butane, n- (< 0.1 %<br>butadiene)<br>106-97-8 |        | inhalation:<br>gas      | 28 d   | rat     | OECD Guideline 422<br>(Combined Repeated Dose<br>Toxicity Study with the<br>Reproduction / Developmental<br>Toxicity Screening Test) |
| Propane<br>74-98-6                            |        | inhalation:<br>gas      | 28 d   | rat     | OECD Guideline 422<br>(Combined Repeated Dose<br>Toxicity Study with the<br>Reproduction / Developmental<br>Toxicity Screening Test) |

**SECTION 12: Ecological information****General ecological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

**12.1. Toxicity****Ecotoxicity:**

Do not empty into drains / surface water / ground water.  
Harmful to aquatic life with long lasting effects.

| Hazardous components<br>CAS-No.            | Value<br>type | Value      | Acute<br>Toxicity<br>Study | Exposure<br>time | Species       | Method   |
|--|---------------|------------|----------------------------|------------------|---------------|--|
| Butane, n- (< 0.1 % butadiene)<br>106-97-8 | LC50          | 27,98 mg/l | Fish                       | 96 h             | Daphnia magna | not specified  |
| Butane, n- (< 0.1 % butadiene)<br>106-97-8 | EC50          | 14,22 mg/l | Daphnia                    | 48 h             |               | not specified  |
| Butane, n- (< 0.1 % butadiene)<br>106-97-8 | EC50          | 7,71 mg/l  | Algae                      | 96 h             |               | not specified  |
| Pentane<br>109-66-0                        | EC50          | 9,74 mg/l  | Daphnia                    | 48 h             |               | OECD Guideline<br>202 (Daphnia sp.<br>Acute<br>Immobilisation<br>Test) |

**12.2. Persistence and degradability**

| Hazardous components<br>CAS-No. | Result                | Route of<br>application | Degradability | Method  |
|---------------------------------|-----------------------|-------------------------|---------------|---|
| Pentane<br>109-66-0             | readily biodegradable | aerobic                 | 87 %          | OECD Guideline 301 F (Ready<br>Biodegradability: Manometric<br>Respirometry Test) |

**12.3. Bioaccumulative potential / 12.4. Mobility in soil****Mobility:**

The product evaporates readily.

| Hazardous components<br>CAS-No. | LogPow | Bioconcentration<br>factor (BCF) | Exposure<br>time | Species | Temperature | Method   |
|---------------------------------|--------|----------------------------------|------------------|---------|-------------|--|
| Pentane<br>109-66-0             | 3,45   |                                  |                  |         | 25 °C       | OECD Guideline 107<br>(Partition Coefficient (n-<br>octanol / water), Shake<br>Flask Method) |

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

| Hazardous components<br>CAS-No.            | PBT/vPvB  |
|--|---|
| Butane, n- (< 0.1 % butadiene)<br>106-97-8 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Propane<br>74-98-6                         | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |

**12.6. Other adverse effects**

No data available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Product disposal:  
Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:  
Disposal must be made according to official regulations.

**Waste code**

14 06 03 Other solvents and solvent mixtures

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.



**SECTION 14: Transport information****14.1. UN number**

|      |      |
|------|------|
| ADR  | 1950 |
| RID  | 1950 |
| ADN  | 1950 |
| IMDG | 1950 |
| IATA | 1950 |

**14.2. UN proper shipping name**

|      |                     |
|------|---------------------|
| ADR  | AEROSOLS            |
| RID  | AEROSOLS            |
| ADN  | AEROSOLS            |
| IMDG | AEROSOLS            |
| IATA | Aerosols, flammable |

**14.3. Transport hazard class(es)**

|      |     |
|------|-----|
| ADR  | 2.1 |
| RID  | 2.1 |
| ADN  | 2.1 |
| IMDG | 2.1 |
| IATA | 2.1 |

**14.4. Packing group**

ADR  
RID  
ADN  
IMDG  
IATA

**14.5. Environmental hazards**

|      |                |
|------|----------------|
| ADR  | not applicable |
| RID  | not applicable |
| ADN  | not applicable |
| IMDG | not applicable |
| IATA | not applicable |

**14.6. Special precautions for user**

|      |                                   |
|------|-----------------------------------|
| ADR  | not applicable<br>Tunnelcode: (D) |
| RID  | not applicable                    |
| ADN  | not applicable                    |
| IMDG | not applicable                    |
| IATA | not applicable                    |

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

|                             |      |
|-----------------------------|------|
| VOC content<br>(2010/75/EC) | 91 % |
|-----------------------------|------|

### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

## SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapor.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.

### Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

**Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.**