

LOCTITE FREEZE & RELEASE

SDS No. : 190437
V004.7

Revision: 07.08.2015

printing date: 08.08.2016

Replaces version from: 31.03.2015

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

1.1. Product identifier

865634 Loctite Freeze & Release

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

Quest Consumables Ltd
Stock House ,Seymour Road
Nuneaton, Warwickshire
CV11 4LB

Phone: +44 2476 322126

Fax-no.: +44 2476 322117

sales@questconsumables.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.	
Skin irritation	Category 2
H315 Causes skin irritation.	
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

Hazard statement:	H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated. H315 Causes skin irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statement:	P251 Do not pierce or burn, even after use. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P211 Do not spray on an open flame or other ignition source. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P102 Keep out of reach of children.
Precautionary statement: Prevention	P273 Avoid release to the environment.
Precautionary statement: Response	P302+P352 IF ON SKIN: Wash with plenty of water.

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****General chemical description:**

Lubricant

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Butane, n- (< 0.1 % butadiene) 106-97-8	203-448-7 01-2119474691-32	30- 50 %	Flam. Gas 1 H220 Press. Gas
Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0	265-151-9 01-2119484651-34	10- 20 %	Asp. Tox. 1 H304 Skin Irrit. 2 H315 STOT SE 3 H336 Flam. Liq. 2 H225 Aquatic Chronic 2 H411
Propane 74-98-6	200-827-9 01-2119486944-21	10- 20 %	Flam. Gas 1 H220 Press. Gas H280
Isobutane 75-28-5	200-857-2 01-2119485395-27	10- 20 %	Flam. Gas 1 H220 Press. Gas H280
Kerosine (petroleum), hydrodesulfurized 64742-81-0	265-184-9	1- 10 %	Aquatic Chronic 2 H411 Asp. Tox. 1 H304

**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.

Obtain medical attention if irritation persists.

Eye contact:

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

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

SKIN: Redness, inflammation.

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

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x) can be released.

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:

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

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated place.
Keep away from heat and direct sunlight.

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 ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Butane 106-97-8 [BUTANE]	750	1.810	Short Term Exposure Limit (STEL):		EH40 WEL
Butane 106-97-8 [BUTANE]	600	1.450	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Butane 106-97-8 [BUTANE]	1.000		Time Weighted Average (TWA):		IR_OEL
Propane 74-98-6 [PROPANE]	1.000		Time Weighted Average (TWA):		IR_OEL

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Naphtha (petroleum), hydrotreated light 64742-49-0	Workers	Dermal	Long term exposure - systemic effects		773 mg/kg	
Naphtha (petroleum), hydrotreated light 64742-49-0	general population	Dermal	Long term exposure - systemic effects		699 mg/kg	
Naphtha (petroleum), hydrotreated light 64742-49-0	Workers	Inhalation	Long term exposure - systemic effects		2034 mg/m ³	
Naphtha (petroleum), hydrotreated light 64742-49-0	general population	Inhalation	Long term exposure - systemic effects		608 mg/m ³	
Naphtha (petroleum), hydrotreated light 64742-49-0	general population	oral	Long term exposure - systemic effects		699 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

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

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; ≥ 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; ≥ 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:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Skin protection:

Wear suitable protective clothing.

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

Appearance

Aerosol

Aerosol

yellow

Odor

characteristic

Odour threshold

No data available / Not applicable

pH

No data available / Not applicable

Initial boiling point

No data available / Not applicable

Flash point	-60 °C (-76 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure	4000 mbar
(25 °C (77 °F))	
Density	0,6 g/cm ³
(20 °C (68 °F))	
Bulk density	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
Solubility (qualitative)	Insoluble
(23 °C (73.4 °F); Solvent: Water)	
Solubility (qualitative)	Soluble
(23 °C (73.4 °F); Solvent: Acetone)	
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	
lower	0,6 % (V)
upper	10,9 % (V)
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

Ignition temperature 230 °C (446 °F)

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

No decomposition if used according to specifications.

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

Irritating organic vapours.

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 1272/2008/EC. 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.

Skin irritation:

Solvent may remove essential oils from the skin making it susceptible to attack from other chemicals.
Causes skin irritation.

Eye irritation:

Prolonged or repeated contact may cause eye irritation.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
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Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Butane, n- (< 0.1 % butadiene) 106-97-8	LC50	658 mg/l		4 h	rat	
Isobutane 75-28-5	LC50	619 mg/l	gas	4 h	mouse	

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
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Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Propane 74-98-6	negative with metabolic activation	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Isobutane 75-28-5	negative with metabolic activation	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration 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 1272/2008/EC. 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 CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Butane, n- (< 0.1 % butadiene) 106-97-8	LC50	27,98 mg/l	Fish	96 h	Daphnia magna	OECD Guideline 203 (Fish, Acute Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) OECD Guideline 201 (Alga, Growth Inhibition Test)
Butane, n- (< 0.1 % butadiene) 106-97-8	EC50	14,22 mg/l	Daphnia	48 h		
Butane, n- (< 0.1 % butadiene) 106-97-8	EC50	7,71 mg/l	Algae	96 h		
Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0	LC50	> 1 - 10 mg/l	Fish			
Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0	EC50	3 mg/l	Daphnia	48 h		
Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0	EC50	> 1 - 10 mg/l	Algae			
Isobutane 75-28-5	EC50	7,71 mg/l	Algae	96 h		
Kerosine (petroleum), hydrodesulfurized 64742-81-0	EC50	> 1.000 mg/l	Daphnia	48 h	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)	

12.2. Persistence and degradability

Persistence and Biodegradability:

No data available.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0	readily biodegradable	aerobic	89 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

The product evaporates readily.

Bioaccumulative potential:

No data available.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0	4 - 5,7					OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
Isobutane 75-28-5	2,88				20 °C	OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB

Butane, n- (< 0.1 % butadiene) 106-97-8	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Propane 74-98-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Isobutane 75-28-5	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. Packaging 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 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 73/78 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 98 %
(2010/75/EC)

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.
- H315 Causes skin irritation.
- 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.

Label elements (DPD):

F+ - Extremely flammable



Risk phrases:

- R12 Extremely flammable.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R67 Vapours may cause drowsiness and dizziness.

Safety phrases:

- S23 Do not breathe spray.
- S24 Avoid contact with skin.
- S51 Use only in well-ventilated areas.
- S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additional labeling:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children

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.