



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

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Loctite 8151

sds no. : 280434  
V004.0

Revision: 25.03.2011  
printing date: 15.04.2013

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

**Product identifier:**

Loctite 8151

**Relevant identified uses of the substance or mixture and uses advised against:**

Intended use:

Antiseize

**Details of the supplier of the safety data sheet:**

Henkel Ireland  
Operations and Research Limited  
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Dublin 24

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**Emergency telephone number:**

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

### 2. Hazards identification

**Classification of the substance or mixture:**

**Classification (DPD):**

F+ - Extremely flammable

R12 Extremely flammable.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

**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.
- R66 Repeated exposure may cause skin dryness or cracking.
- 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
- For consumer use only: S2 Keep out of the reach of children
- S46 If swallowed, seek medical advice immediately and show this container or label.

**Other hazards:**

- None if used properly.

### 3. Composition/information on ingredients

**General chemical description:**

Antiseize

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Propane 74-98-6	200-827-9	> 1- < 2,5 %	Flammable gases 1 H220 Gases under pressure
Butane, n- 106-97-8	203-448-7	> 25- < 50 %	Flammable gases 1 H220 Gases under pressure
Pentane 109-66-0	203-692-4	> 2,5- < 10 %	Flammable liquids 2 H225 Aspiration hazard 1 H304 Specific target organ toxicity - single exposure 3 H336 Chronic hazards to the aquatic environment 2 H411
Naphtha (petroleum), hydrotreated heavy Benzene < 0,1 % 64742-48-9	265-150-3	> 10- < 25 %	Aspiration hazard 1 H304  EUH066
Aluminium powder (stabilised) 7429-90-5	231-072-3	> 2,5- < 10 %	Substances and mixtures, which on contact with water, emit flammable gases 2 H261 Flammable solids 1 H228
Naphtha, hydrotreated light, <0,1% benzene 64742-49-0	265-151-9	> 2,5- < 10 %	Flammable liquids 2 H225 Chronic hazards to the aquatic environment 2 H411 Skin irritation 2 H315 Aspiration hazard 1 H304 Specific target organ toxicity - single exposure 3 H336
Solvent naphtha (petroleum), light arom., <0.1% Benzene 64742-95-6	265-199-0	> 0,1- < 0,9 %	Flammable liquids 3 H226 Specific target organ toxicity - single exposure 3 H335, H336 Aspiration hazard 1 H304  EUH066 Chronic hazards to the aquatic environment 2 H411

**Only dangerous ingredients for which a CLP classification is already available are displayed in this table.  
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.**

**Declaration of ingredients according to DPD (EC) No 1999/45:**

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Propane 74-98-6	200-827-9	> 1 - < 2,5 %	F+ - Extremely flammable; R12
Butane, n- 106-97-8	203-448-7	> 25 - < 50 %	F+ - Extremely flammable; R12
Pentane 109-66-0	203-692-4	> 2,5 - < 10 %	N - Dangerous for the environment; R51, R53 F+ - Extremely flammable; R12 Xn - Harmful; R65 R66 R67
Naphtha (petroleum), hydrotreated heavy Benzene < 0,1 % 64742-48-9	265-150-3	> 10 - < 25 %	Xn - Harmful; R65, R66
Aluminium powder (stabilised) 7429-90-5	231-072-3	> 2,5 - < 10 %	F - Highly flammable; R11, R15
Naphtha, hydrotreated light, <0,1% benzene 64742-49-0	265-151-9	> 2,5 - < 10 %	F - Highly flammable; R11 Xn - Harmful; R65 Xi - Irritant; R38 R67 N - Dangerous for the environment; R51/53
Dithiophosphoric acid ester		> 0,1 - < 0,9 %	N - Dangerous for the environment; R51/53
Solvent naphtha (petroleum), light arom., <0.1% Benzene 64742-95-6	265-199-0	> 0,1 - < 0,9 %	N - Dangerous for the environment; R51/53 Xn - Harmful; R65 Xi - Irritant; R37 R10, R66, R67
Phosphorodithioic acid, O,O-di-C1-14- alkyl esters, zinc salts 68649-42-3	272-028-3	> 0,05 - < 0,3 %	N - Dangerous for the environment; R51/53 Xi - Irritant; R36

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.

Substances without classification may have community workplace exposure limits available.

#### 4. First aid measures

**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.

**Most important symptoms and effects, both acute and delayed:**

Vapors may cause drowsiness and dizziness.

Repeated exposure may cause skin dryness or cracking.

**Indication of any immediate medical attention and special treatment needed:**

See section: Description of first aid measures

#### 5. Firefighting measures

**Extinguishing media:**

**Suitable extinguishing media:**

Carbon dioxide, foam, powder

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

None known

**Special hazards arising from the substance or mixture:**

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>) can be released.

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

**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.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:**

Avoid skin and eye contact.

Ensure adequate ventilation.

**Environmental precautions:**

Do not let product enter drains.

**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.

**Reference to other sections:**

See advice in chapter 8

## 7. Handling and storage

**Precautions for safe handling:**

Keep away from sources of ignition - no smoking.

Vapours should be extracted to avoid inhalation.

Use only in well-ventilated areas.

**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.

**Conditions for safe storage, including any incompatibilities:**

Store in a cool, dry place.

Do not store near sources of heat or ignition, or reactive materials.

**Specific end use(s):**

Antiseize

## 8. Exposure controls/personal protection

**Control parameters:**

Valid for  
Great Britain

Ingredient	ppm	mg/m <sup>3</sup>	Type	Category	Remarks
BUTANE 106-97-8	750	1.810	Short Term Exposure Limit (STEL):		EH40 WEL
BUTANE 106-97-8	600	1.450	Time Weighted Average (TWA):		EH40 WEL
PENTANE 109-66-0	600	1.800	Time Weighted Average (TWA):		EH40 WEL
PENTANE 109-66-0	1.000	3.000	Time Weighted Average (TWA):	Indicative	ECTLV
Aluminium 7429-90-5		10	Time Weighted Average (TWA):		EH40 WEL
Aluminium 7429-90-5		4	Time Weighted Average (TWA):		EH40 WEL

**Exposure controls:**

## Respiratory protection:

Do not inhale vapors and fumes.  
Use only in well-ventilated areas.

## 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:

Wear protective glasses.

## Skin protection:

Suitable protective clothing

## 9. Physical and chemical properties

**Information on basic physical and chemical properties:**

Appearance	aerosol aerosol
Odor	grey characteristic
pH	No data available / Not applicable
Initial boiling point	0 °C (32 °F)
Flash point	-60 °C (-76 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure (20 °C (68 °F))	3000 mbar
Density (20 °C (68 °F))	0,692 g/cm <sup>3</sup>
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) (Solvent: Water)	Not miscible
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	0,7 % (V)
upper	8,5 % (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

**Other information:**

No data available / Not applicable

## 10. Stability and reactivity

**Reactivity:**

None known

**Chemical stability:**

Stable under recommended storage conditions.

**Possibility of hazardous reactions:**

See section reactivity

**Conditions to avoid:**

Stable under normal conditions of storage and use.

**Incompatible materials:**

None if used properly.

**Hazardous decomposition products:**

carbon oxides.

## 11. Toxicological information

**General toxicological information:**

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/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.

**Inhalative toxicity:**

May cause headache and dizziness.

**Skin irritation:**

Prolonged or repeated contact may cause skin irritation.

**Eye irritation:**

May cause mild irritation to the eyes.

**Acute toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Naphtha (petroleum), hydrotreated heavy Benzene < 0,1 % 64742-48-9	LC50	> 11 mg/l	inhalation	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Solvent naphtha (petroleum), light arom., <0.1% Benzene 64742-95-6	LD50 LD0	3.500 mg/kg	oral dermal		rat rat	OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)

**Skin corrosion/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Pentane 109-66-0	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Naphtha (petroleum), hydrotreated heavy Benzene < 0,1 % 64742-48-9	moderately irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Respiratory or skin sensitization:**

Hazardous components CAS-No.	Result	Test type	Species	Method
Solvent naphtha (petroleum), light arom., <0.1% Benzene 64742-95-6	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

**Germ cell mutagenicity:**

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Butane, n- 106-97-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		

**12. Ecological information****General ecological information:**

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

**Ecotoxicity:**

Do not empty into drains / surface water / ground water.  
Harmful to aquatic organisms.  
May cause long-term adverse effects in the aquatic environment.  
No data available for the product.

**Mobility:**

The product evaporates readily.  
The product is insoluble and floats on water.



**Toxicity:**

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Pentane 109-66-0	LC50	>= 0,1	Fish	96 h	Oncorhynchus kisutch	OECD Guideline 203 (Fish, Acute Toxicity Test)
Pentane 109-66-0	EC50	9,74 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Naphtha (petroleum), hydrotreated heavy Benzene < 0,1 % 64742-48-9	LC50	> 1.000 mg/l	Fish			OECD Guideline 203 (Fish, Acute Toxicity Test)
Naphtha (petroleum), hydrotreated heavy Benzene < 0,1 % 64742-48-9	EC50	> 1.000 mg/l	Daphnia		Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Naphtha (petroleum), hydrotreated heavy Benzene < 0,1 % 64742-48-9	EC50	> 1.000 mg/l	Algae			OECD Guideline 201 (Alga, Growth Inhibition Test)
Aluminium powder (stabilised) 7429-90-5	NOEC	> 100 mg/l	Fish	96 h	Salmo trutta	OECD Guideline 203 (Fish, Acute Toxicity Test)
Naphtha, hydrotreated light, <0,1% benzene 64742-49-0	LC50	1 - 10 mg/l	Fish			OECD Guideline 203 (Fish, Acute Toxicity Test)
Naphtha, hydrotreated light, <0,1% benzene 64742-49-0	EC50	3 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Naphtha, hydrotreated light, <0,1% benzene 64742-49-0	EC50	1 - 10 mg/l	Algae			OECD Guideline 201 (Alga, Growth Inhibition Test)
Solvent naphtha (petroleum), light arom., <0.1% Benzene 64742-95-6	LC50	18 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Solvent naphtha (petroleum), light arom., <0.1% Benzene 64742-95-6	EC50	21,3 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Solvent naphtha (petroleum), light arom., <0.1% Benzene 64742-95-6	EC50	1 - 10 mg/l	Algae			OECD Guideline 201 (Alga, Growth Inhibition Test)
Phosphorodithioic acid, O,O- di-C1-14-alkyl esters, zinc salts 68649-42-3	LC50	1 - 10 mg/l	Fish			OECD Guideline 203 (Fish, Acute Toxicity Test)
Phosphorodithioic acid, O,O- di-C1-14-alkyl esters, zinc salts 68649-42-3	EC50	1 - 10 mg/l	Daphnia		Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

**Persistence and degradability:**

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
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Naphtha (petroleum), hydrotreated heavy Benzene < 0,1 % 64742-48-9			23 - 35 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Solvent naphtha (petroleum), light arom., <0.1% Benzene 64742-95-6	readily biodegradable	aerobic	78 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
			21 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts 68649-42-3		aerobic	5 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

**Bioaccumulative potential / Mobility in soil:**

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Butane, n- 106-97-8	2,89					
Pentane 109-66-0	3,39					
Solvent naphtha (petroleum), light arom., <0.1% Benzene 64742-95-6	> 3					OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

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

Product disposal:

Dispose of according to regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Disposal must be made according to official regulations.

Waste code

14 06 03 - other solvents and solvent mixtures

**14. Transport information****Road transport ADR:**

Class: 2  
Packaging group:  
Classification code: 5F  
Hazard ident. number:  
UN no.: 1950  
Label: 2.1  
Technical name: AEROSOLS  
Tunnelcode: (D)

**Railroad transport RID:**

Class: 2  
Packaging group:  
Classification code: 5F  
Hazard ident. number: 23  
UN no.: 1950  
Label: 2.1  
Technical name: AEROSOLS  
Tunnelcode:

**Inland water transport ADN:**

Class: 2  
Packaging group:  
Classification code: 5F  
Hazard ident. number:  
UN no.: 1950  
Label: 2.1  
Technical name: AEROSOLS

**Marine transport IMDG:**

Class: 2.1  
Packaging group:  
UN no.: 1950  
Label: 2.1  
EmS: F-D ,S-U  
Seawater pollutant: -  
Proper shipping name: AEROSOLS

**Air transport IATA:**

Class: 2.1  
Packaging group:  
Packaging instructions (passenger) 203  
Packaging instructions (cargo) 203  
UN no.: 1950  
Label: 2.1  
Proper shipping name: Aerosols, flammable

**15. Regulatory information**

**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

VOC content 70,97 %  
(1999/13/EC)

## 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:

- R10 Flammable.
- R11 Highly flammable.
- R12 Extremely flammable.
- R15 Contact with water liberates extremely flammable gases.
- R36 Irritating to eyes.
- R37 Irritating to respiratory system.
- R38 Irritating to skin.
- R51 Toxic to aquatic organisms.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R53 May cause long-term adverse effects in the aquatic environment.
- R65 Harmful: may cause lung damage if swallowed.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

- EUH066 Repeated exposure may cause skin dryness or cracking.
- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H228 Flammable solid.
- H261 In contact with water releases flammable gases.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.

### Further information:

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and its subsequent amendments, and Commission Directive 1999/45/EC.

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.