



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

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LOCTITE SF 770 known as Loctite 770

SDS No. : 153555
V005.4

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

1.1. Product identifier

LOCTITE SF 770 known as Loctite 770

Contains:

n-Heptane

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

Intended use:

Primer, containing solvents

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@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):

Flammable liquids	Category 2
H225 Highly flammable liquid and vapor.	
Skin irritation	Category 2
H315 Causes skin irritation.	
Specific target organ toxicity - single exposure	Category 3
H336 May cause drowsiness or dizziness.	
Target organ: Central Nervous System	
Aspiration hazard	Category 1
H304 May be fatal if swallowed and enters airways.	
Acute hazards to the aquatic environment	Category 1
H400 Very toxic to aquatic life.	
Chronic hazards to the aquatic environment	Category 1
H410 Very toxic to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:**Signal word:**

Danger

Hazard statement:

H225 Highly flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement:

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

**Precautionary statement:
Prevention**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapours.
P273 Avoid release to the environment.

**Precautionary statement:
Response**

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331 Do NOT induce vomiting.
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:**

Primer, containing solvents

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
n-Heptane 142-82-5	205-563-8	75- < 100 %	Flam. Liq. 2 H225 Asp. Tox. 1 H304 Skin Irrit. 2 H315 STOT SE 3 H336 Aquatic Acute 1 H400 Aquatic Chronic 1 H410
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	229-713-7 01-2119977097-24	<= 0,1 %	Acute Tox. 3; Oral H301 Skin Corr. 1B H314

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 from a specialist.

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.

ASPIRATION: Coughing, shortness of breath, nausea. Delayed effect: bronchopneumonia or pulmonary oedema

Vapors may cause drowsiness and dizziness.

Prolonged or repeated contact may cause eye irritation.

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

Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

Do not induce vomiting.

Seek medical attention from a specialist.

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Foam, extinguishing powder, carbon dioxide.

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.

Do not expose to direct heat.

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

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

Ensure adequate ventilation.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

Wipe up using absorbent material.
Store in a partly filled, closed container until disposal.
Dispose of contaminated material as waste according to Section 13.

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

7.3. Specific end use(s)

Primer, containing solvents

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
Heptane 142-82-5 [N-HEPTANE]	500	2.085	Time Weighted Average (TWA):		EH40 WEL
Heptane 142-82-5 [N-HEPTANE]	500	2.085	Time Weighted Average (TWA):	Indicative	ECLTV

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Heptane 142-82-5 [N-HEPTANE]	500	2.085	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Heptane 142-82-5 [N-HEPTANE]	500	2.085	Time Weighted Average (TWA):	Indicative	ECLTV
Methylcyclohexane 108-87-2 [METHYLCYCLOHEXANE]	400	1.600	Time Weighted Average (TWA):		IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	aqua (freshwater)					0,24 mg/L	
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	aqua (marine water)					0,024 mg/L	
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	aqua (intermittent releases)					0,5 mg/L	
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	sewage treatment plant (STP)					13 mg/L	
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	sediment (freshwater)				137 mg/kg		
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	sediment (marine water)				13,7 mg/kg		
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	soil				27,2 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
n-Heptane 142-82-5	Workers	dermal	Long term exposure - systemic effects		300 mg/kg bw/day	
n-Heptane 142-82-5	Workers	Inhalation	Long term exposure - systemic effects		2085 mg/m ³	
n-Heptane 142-82-5	general population	dermal	Long term exposure - systemic effects		149 mg/kg bw/day	
n-Heptane 142-82-5	general population	Inhalation	Long term exposure - systemic effects		447 mg/m ³	
n-Heptane 142-82-5	general population	oral	Long term exposure - systemic effects		149 mg/kg bw/day	
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	Workers	inhalation	Long term exposure - systemic effects		4,4 mg/m ³	
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	Workers	dermal	Long term exposure - systemic effects		1,25 mg/kg	
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	general population	inhalation	Long term exposure - systemic effects		1,1 mg/m ³	
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	general population	dermal	Long term exposure - systemic effects		0,625 mg/kg	
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	general population	oral	Long term exposure - systemic effects		0,25 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ventilate working rooms thoroughly. Avoid naked flames, sparking and sources of ignition. Switch off electrical devices. Do not smoke, do not weld. Do not empty waste into waste water drains.

Respiratory protection:

Use only in well-ventilated areas.

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; >= 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.

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	liquid liquid transparent, colourless, Clear
Odor	Aliphatic
Odour threshold	No data available / Not applicable
pH	Not applicable
Initial boiling point	96 - 98 °C (204.8 - 208.4 °F)
Flash point	-2 °C (28.4 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure (20 °C (68 °F))	35 mm hg
Density (20 °C (68 °F))	0,718 g/cm3
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	1,1 %(V)

upper	6,7 % (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	215 °C (419 °F)
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SECTION 10: Stability and reactivity

10.1. Reactivity

Strong oxidizing agents.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable under normal conditions of storage and use.

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

carbon oxides.

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.

STOT-single exposure:

May cause drowsiness or dizziness.

Aspiration hazard:

May be fatal if swallowed and enters airways.

Skin irritation:

Causes skin irritation.

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

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
n-Heptane 142-82-5	LD50	> 5.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
n-Heptane 142-82-5	LC50	29,29 mg/l	vapour	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
n-Heptane 142-82-5	LD50	> 2.000 mg/kg	dermal		rabbit	OECD Guideline 402 (Acute Dermal Toxicity)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
n-Heptane 142-82-5	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		Ames 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:**

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

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
n-Heptane 142-82-5	LC50	> 220 - 270 mg/l	Fish	96 h	Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
n-Heptane 142-82-5	EC50	1,5 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	LC50	> 100 - 220 mg/l	Fish	96 h	Leuciscus idus	DIN 38412-15
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	EC50	50 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	EC50	> 100 mg/l	Algae	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	NOEC	> 100 mg/l	Algae	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	EC 50	330 mg/l	Bacteria	17 h		
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	NOEC	> 12 mg/l	chronic Daphnia	21 day	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

12.2. Persistence and degradability**Persistence and Biodegradability:**

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
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1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	not inherently biodegradable	aerobic	< 20 %	OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test)
	Not readily biodegradable.	aerobic	< 20 %	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away 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
n-Heptane 142-82-5	4,66					OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2		< 0,4	42 day	Cyprinus carpio		OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish)

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
n-Heptane 142-82-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	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 according to regulations.

Disposal of uncleaned packages:

Dispose of in accordance with local and national 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	1206
RID	1206
ADN	1206
IMDG	1206
IATA	1206

14.2. UN proper shipping name

ADR	HEPTANES (solution)
RID	HEPTANES (solution)
ADN	HEPTANES (solution)
IMDG	HEPTANES (solution)
IATA	Heptanes (solution)

14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

14.4. Packing group

ADR	II
RID	II
ADN	II
IMDG	II
IATA	II

14.5. Environmental hazards

ADR	Environmentally Hazardous
RID	Environmentally Hazardous
ADN	Environmentally Hazardous
IMDG	Marine pollutant
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable Tunnelcode: (D/E)
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 100 %
(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:

- H225 Highly flammable liquid and vapor.
- H301 Toxic if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- H410 Very 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 - Highly flammable

Xn - Harmful

N - Dangerous for the environment



Risk phrases:

- R11 Highly flammable.
- R38 Irritating to skin.
- R65 Harmful: may cause lung damage if swallowed.
- R67 Vapours may cause drowsiness and dizziness.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

- S16 Keep away from sources of ignition - No smoking.
- S23 Do not breathe vapour.
- S28 After contact with skin, wash immediately with plenty of water and soap.
- S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.
- S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Additional labeling:

- 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.

Contains:

n-Heptane

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.