



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

Page 1 of 17

LOCTITE LB 8151 known as Loctite 8151

SDS No.: 280434

V007.2

Revision: 03.11.2021

printing date: 12.05.2022

Replaces version from: 02.11.2021

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

1.1. Product identifier

LOCTITELB 8151 known as Loctite 8151

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

Intended use:

Antiseize

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Adhesives

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

Fax-no.: +44 (1442) 278071

ua-productsafety.uk@henkel.com

For Safety Data Sheet updates please visit our website <https://mysds.henkel.com/index.html#/appSelection> or www.henkel-adhesives.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):

Aerosol

Category 1

H222 Extremely flammable aerosol.

H229 Pressurized container: May burst if heated.

Specific target organ toxicity - single exposure

Category 3

H336 May cause drowsiness or dizziness.

Target organ: Central nervous system

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:**Contains**

pentane

Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Signal word:

Danger

Hazard statement:

H222 Extremely flammable aerosol.

H229 Pressurized container: May burst if heated.

H336 May cause drowsiness or dizziness.

H412 Harmful 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 contents/container in accordance with national regulation.***

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.

Precautionary statement:

P261 Avoid breathing spray.

Prevention

P273 Avoid release to the environment.

2.3. Other hazards

None if used properly.

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:**

Antiseize

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	25- < 50 %	Press. Gas H280 Flam. Gas 1A H220
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	927-241-2 01-2119471843-32	10- < 25 %	Asp. Tox. 1 H304 Flam. Liq. 3 H226 STOT SE 3 H336 Aquatic Chronic 3 H412
pentane 109-66-0	203-692-4 01-2119459286-30	10- < 25 %	Flam. Liq. 2 H225 Asp. Tox. 1 H304 STOT SE 3 H336 Aquatic Chronic 2 H411
aluminium powder (stabilised) 7429-90-5	231-072-3 01-2119529243-45	2,5- < 10 %	Water-react. 2 H261 Flam. Sol. 1 H228
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	921-024-6 01-2119475514-35	2,5- < 10 %	Flam. Liq. 2 H225 Asp. Tox. 1 H304 Skin Irrit. 2 H315 STOT SE 3 H336 Aquatic Chronic 2 H411
Propane 74-98-6	200-827-9 01-2119486944-21	1- < 2,5 %	Flam. Gas 1A H220 Press. Gas H280

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

Vapors may cause drowsiness and dizziness.

Prolonged or repeated contact may cause eye irritation.

Prolonged or repeated contact may cause skin 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) and carbon dioxide (CO₂) 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 contact with skin and eyes.

Ensure adequate ventilation.

Wear protective equipment.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

Dispose of contaminated material as waste according to Section 13.

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**

Keep away from sources of ignition - no smoking.

Vapours should be extracted to avoid inhalation.

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

Ensure good ventilation/extraction.

Store in a cool, dry place.

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

Refer to Technical Data Sheet

7.3. Specific end use(s)

Antiseize

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]	600	1.450	Time Weighted Average (TWA):		EH40 WEL
Butane 106-97-8 [Butane]	750	1.810	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Pentane 109-66-0 [PENTANE]	600	1.800	Time Weighted Average (TWA):		EH40 WEL
Pentane 109-66-0 [PENTANE]	1.000	3.000	Time Weighted Average (TWA):	Indicative	ECTLV

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 [N-BUTANE]	1.000		Short Term Exposure Limit (STEL):	15 minutes	IR_OEL
Pentane 109-66-0 [PENTANE]	1.000	3.000	Time Weighted Average (TWA):	Indicative	ECTLV
Pentane 109-66-0 [PENTANE]	1.000	3.000	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Isobutane 75-28-5 [ISOBUTANE]	1.000		Short Term Exposure Limit (STEL):	15 minutes	IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	aqua (freshwater)						
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	aqua (marine water)						
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	sediment (freshwater)						
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	sediment (marine water)						
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Air						no hazard identified
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	soil						
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Predator						
pentane 109-66-0	aqua (freshwater)		0,23 mg/l				
pentane 109-66-0	aqua (marine water)		0,23 mg/l				
pentane 109-66-0	aqua (intermittent releases)		0,88 mg/l				
pentane 109-66-0	sediment (freshwater)				1,2 mg/kg		
pentane 109-66-0	sediment (marine water)				1,2 mg/kg		
pentane 109-66-0	Soil				0,55 mg/kg		
pentane 109-66-0	sewage treatment plant (STP)		3,6 mg/l				

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Workers	inhalation	Long term exposure - systemic effects		871 mg/m3	no hazard identified
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Workers	dermal	Long term exposure - systemic effects		77 mg/kg	no hazard identified
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	General population	inhalation	Long term exposure - systemic effects		185 mg/m3	no hazard identified
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	General population	dermal	Long term exposure - systemic effects		46 mg/kg	no hazard identified
Hydrocarbons , C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	General population	oral	Long term exposure - systemic effects		46 mg/kg	no hazard identified
pentane 109-66-0	Workers	dermal	Long term exposure - systemic effects		432 mg/kg	
pentane 109-66-0	Workers	inhalation	Long term exposure - systemic effects		3000 mg/m3	
pentane 109-66-0	General population	dermal	Long term exposure - systemic effects		214 mg/kg	
pentane 109-66-0	General population	inhalation	Long term exposure - systemic effects		643 mg/m3	
pentane 109-66-0	General population	oral	Long term exposure - systemic effects		214 mg/kg	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	Workers	dermal	Long term exposure - systemic effects		773 mg/kg	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	Workers	inhalation	Long term exposure - systemic effects		2035 mg/m3	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	General population	dermal	Long term exposure - systemic effects		699 mg/kg	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	General population	inhalation	Long term exposure - systemic effects		608 mg/m3	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	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:

Do not inhale vapors and fumes.

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

Use filter A-P2 if vapours/aerosols occur which may be inhaled.

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	aerosol
	grey
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 °C (-47.2 °F)
Flash point	-60 °C (-76 °F)
Evaporation rate	No data available / Not applicable
Flammability	No data available / Not applicable
Explosive limits	
lower	0,8 % (V)
upper	10,9 % (V)
Vapour pressure	3000 mbar
(20 °C (68 °F))	
Relative vapour density:	No data available / Not applicable
Density	0,692 g/cm ³
(20 °C (68 °F))	
Bulk density	No data available / Not applicable
Solubility	No data available / Not applicable
Solubility (qualitative)	Not miscible
(Solvent: Water)	
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

None known

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

None if used properly.

10.6. Hazardous decomposition products

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
aluminium powder (stabilised) 7429-90-5	LD50	> 15.900 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	LD50	> 5.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
Butane, n- (<0.1 % butadiene) 106-97-8	LC50	274200 ppm	gas	4 h	rat	not specified
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	LC50		vapour	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
aluminium powder (stabilised) 7429-90-5	LC50	> 5 mg/l	dust/mist	4 h	rat	not specified
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	LC50	> 25,2 mg/l	vapour	4 h	rat	not specified
Propane 74-98-6	LC50	> 800000 ppm	gas	15 min	rat	not specified

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation/Corrosion)
pentane 109-66-0	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation/Corrosion)
aluminium powder (stabilised) 7429-90-5	not irritating	24 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation/Corrosion)

Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation/Corrosion)
aluminium powder (stabilised) 7429-90-5	not irritating		rabbit	FDA Guideline

Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Species	Method
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
aluminium powder (stabilised) 7429-90-5	not sensitising	Draize Test	guinea pig	Draize Test

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study/ Route of administration	Metabolic activation/ Exposure time	Species	Method
Butane, n- (<0.1 % butadiene) 106-97-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Butane, n- (<0.1 % butadiene) 106-97-8	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	negative	in vitro mammalian chromosome aberration test	with and without		equivalent or similar to OECD Guideline 479 (Genetic Toxicology: In Vitro Sister Chromatid Exchange Assay in Mammalian Cells)
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	negative	in vitro mammalian chromosome aberration test	with and without		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
aluminium powder (stabilised) 7429-90-5	positive	in vitro mammalian cell micronucleus test	without		OECD Guideline 487 (In vitro Mammalian Cell Micronucleus Test)
aluminium powder (stabilised) 7429-90-5	positive	in vitro mammalian chromosome aberration test	without		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
aluminium powder (stabilised) 7429-90-5	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Propane 74-98-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Propane 74-98-6	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Butane, n- (<0.1 % butadiene) 106-97-8	negative			Drosophila melanogaster	not specified
Butane, n- (<0.1 % butadiene) 106-97-8	negative	inhalation: gas		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	negative	inhalation: vapour		rat	equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	negative	oral: gavage		mouse	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
aluminium powder (stabilised) 7429-90-5	negative	oral: gavage		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
aluminium powder (stabilised) 7429-90-5	ambiguous	oral: gavage		rat	OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)
Propane 74-98-6	negative			Drosophila melanogaster	not specified
Propane 74-98-6	negative	inhalation: gas		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Carcinogenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	not carcinogenic	inhalation: vapour	6 hours plus T90 (12 minutes) 5 days per week for 105 weeks	rat	male/female	equivalent or similar OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Butane, n- (<0.1 % butadiene) 106-97-8	NOAEL P 21,4 mg/l NOAEL F1 21,4 mg/l	screening	inhalation: gas	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
aluminium powder (stabilised) 7429-90-5	NOAEL P 1.000 mg/kg NOAEL F1 1.000 mg/kg	screening	oral: gavage	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Propane 74-98-6	NOAEL P 21,6 mg/l NOAEL F1 21,6 mg/l	screening	inhalation: gas	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

STOT-single exposure:

No data available.

STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Butane, n- (<0.1 % butadiene) 106-97-8		inhalation: gas	28 d	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOAEL >= 1.000 mg/kg	oral: gavage	7 days/week	rat	equivalent or similar to OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reprod./Develop. Tox. Screening Test)
Propane 74-98-6		inhalation: gas	28 d 6 h/d, 7 d/w	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard:

No data available.

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

Do not empty into drains / surface water / ground water.

12.1. Toxicity**Toxicity (Fish):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Butane, n- (<0.1 % butadiene) 106-97-8	LC50	27,98 mg/l	96 h		not specified
Hydrocarbons, C9-C10, n- alkanes, isoalkanes, cyclics, <2% aromatics	LL50	> 10 - < 30 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
pentane 109-66-0	LC 50	> 0,1 mg/l		Trout family (Salmonidae)	not specified
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	LL50	11,4 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Butane, n- (<0.1 % butadiene) 106-97-8	EC50	14,22 mg/l	48 h		not specified
Hydrocarbons, C9-C10, n- alkanes, isoalkanes, cyclics, <2% aromatics	EL50	> 22 - < 46 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
pentane 109-66-0	EC50	9,74 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	EL50	3 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	NOEC	0,17 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Butane, n- (<0.1 % butadiene) 106-97-8	EC50	7,71 mg/l	96 h		not specified
Hydrocarbons, C9-C10, n- alkanes, isoalkanes, cyclics, <2% aromatics	EL50	> 1000 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C9-C10, n- alkanes, isoalkanes, cyclics, <2% aromatics	NOELR	< 1 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	EL50	> 30 - 100 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	NOELR	3 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

No data available.

12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Hydrocarbons, C9-C10, n- alkanes, isoalkanes, cyclics, <2% aromatics	readily biodegradable	aerobic	89 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
pentane 109-66-0	readily biodegradable	aerobic	87 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	readily biodegradable	aerobic	98 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
pentane 109-66-0	3,45	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol/ water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous substances 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.
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
pentane 109-66-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
aluminium powder (stabilised) 7429-90-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	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.

12.6. Other adverse effects

No data available.

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

Product disposal:

Do not empty into drains / surface water / ground water.

Dispose of in accordance with local and national 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.

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
	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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009):	Not applicable
Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):	Not applicable
Persistent organic pollutants (Regulation (EU) 2019/1021):	Not applicable
VOC content (2010/75/EC)	73 %

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.
H226 Flammable liquid and vapor.
H228 Flammable solid.
H261 In contact with water releases flammable gas.
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.
H412 Harmful to aquatic life with long lasting effects.

Further information:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

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.

Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your_company.com).

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.