

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 6 (replaces version 5)

Revision: 17.01.2023

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

1.1 Product identifier

Trade name: **Anti seize**

Article number: 83972

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

FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

Application of the substance / the mixture Release agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

KENT (United Kingdom) Ltd

Forsyth House

Pitreavie Drive

Pitreavie Business Park

Dunfermline

Fife

KY11 8US

Tel: +44 01383 723344 / 0800 136925 Monday - Thursday 8.30am - 5.30pm, Friday 9.00am - 3.00pm

Fax: +44 1383 620079

SDS@kenteurope.com

1.4 Emergency telephone number:

Tel: +44 01383 723344 During normal office hours - Monday - Thursday 8.30am - 5.30pm, Friday 9.00am - 3.00pm

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



flame

Aerosol 1

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.



environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



STOT SE 3

H336 May cause drowsiness or dizziness.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms



GHS02



GHS07



GHS09

Signal word *Danger*

Hazard-determining components of labelling:

pentane

Hazard statements

H222 Extremely flammable aerosol.

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H229 Pressurised container: May burst if heated.
 H336 May cause drowsiness or dizziness.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P211 Do not spray on an open flame or other ignition source.
 P251 Do not pierce or burn, even after use.
 P260 Do not breathe mist/vapours/spray.
 P280 Wear protective gloves / eye protection.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards**Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

· **Description:** Mixture of the substances listed below with harmless additions.

Dangerous components:

CAS: 109-66-0 EINECS: 203-692-4 Reg.nr.: 01-2119459286-30	pentane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H336, EUH066	25-50%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	Propane liquefied ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-25%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	butane, pure ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-25%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27	Isobutane ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	5-10%
CAS: 7440-50-8 EINECS: 231-159-6 Reg.nr.: 01-2119480154-42	Copper ⚠ Aquatic Acute 1, H400; Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302	<3%

· **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

· **After inhalation** Supply fresh air; consult doctor in case of symptoms.

After skin contact

Instantly wash with water and soap and rinse thoroughly.

Generally the product is not skin irritating.

· **After eye contact** Rinse opened eye for several minutes under running water.

· **After swallowing** In case of persistent symptoms consult doctor.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

· **Suitable extinguishing agents** Use fire fighting measures that suit the environment.

· **5.2 Special hazards arising from the substance or mixture** Formation of poisonous gases during heating or in fires.

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- **5.3 Advice for firefighters**
- **Protective equipment:** Put on breathing apparatus.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Put on breathing apparatus.
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Inform respective authorities in case product reaches water or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Keep breathing equipment ready.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class 2 B**
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- **Components with limit values that require monitoring at the workplace:**

109-66-0 pentane

WEL Long-term value: 1800 mg/m³, 600 ppm

106-97-8 butane, pure

WEL Short-term value: 1810 mg/m³, 750 ppm
Long-term value: 1450 mg/m³, 600 ppm
Carc (if more than 0.1% of buta-1.3-diene)

7440-50-8 Copper

WEL Short-term value: 2** mg/m³
Long-term value: 0.2* 1** mg/m³
*fume **dusts and mists (as Cu)

- **Regulatory information** WEL: EH40/2020

DNELs

109-66-0 pentane

Dermal Long term systemic effect 432 mg/kg bw/day (Worker)

Inhalative Long term systemic effect 3,000 mg/m³ (Worker)

7440-50-8 Copper

Dermal Acute systemic effect 273 mg/kg bw/day (Worker)

Long term systemic effect 137 mg/kg (Worker)

Inhalative Acute systemic effect 20 mg/m³ (Worker)

PNECs

109-66-0 pentane

PNEC 0.23 mg/l (Aqua (freshwater))

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	1.2 mg/kg (Freshwater sediment) 3.6 mg/l (Sewage treatment plant) 0.55 mg/kg (Soil)
7440-50-8 Copper	
PNEC	0.0078 mg/l (Aqua (freshwater)) 0.0052 mg/l (Aqua (marine water)) 87 mg/kg (Freshwater sediment) 676 mg/kg (Marine water sediment) 65.5 mg/kg (Soil)

· **Additional information:** The lists that were valid during the compilation were used as basis.

· 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures**
Wash hands during breaks and at the end of the work.
Do not inhale gases / fumes / aerosols.
- **Breathing equipment:** Filter A2 / P3 (EN 14387)
- **Hand protection**



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Safety glasses (EN 166)

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

- **Physical state** Aerosol
- **Colour:** Copper coloured
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** Not determined
- **Boiling point or initial boiling point and boiling range** Not applicable, as aerosol
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** 1.4 Vol %
- **Upper:** 10.9 Vol %
- **Flash point:** Not applicable, as aerosol
- **Ignition temperature:** 285 °C
- **Decomposition temperature:** Not determined.
- **pH** Mixture is non-soluble (in water).
- **Viscosity:**
- **Kinematic viscosity** Not determined.
- **dynamic:** Not determined.

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· Solubility	
· Water:	Not miscible / difficult to mix
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	8,300 hPa
· Density and/or relative density	
· Density at 20 °C	0.68 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.

· 9.2 Other information

· Appearance:	
· Form:	Aerosol
· Important information on protection of health and environment, and on safety.	
· Self-inflammability:	Product is not selfigniting.
· Explosive properties:	Not determined.
· Solvent content:	
· Organic solvents:	57.5 %
· Change in condition	
· Evaporation rate	Not applicable.

· Information with regard to physical hazard classes

· Explosives	Void
· Flammable gases	Void
· Aerosols	Extremely flammable aerosol. Pressurised container: May burst if heated.
· Oxidising gases	
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values that are relevant for classification:

109-66-0 pentane

Oral	LD50	2,001 mg/kg (Rat)
Dermal	LD50	2,001 mg/kg (Rat)

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74-98-6 Propane liquefied

ErC 50 19.37 mg/l (Algae) (96 hr)

106-97-8 butane, pure

Inhalative LC50 (4 hr) 658 mg/l (Rat)

ErC 50 19.37 mg/l (Algae) (96 hr)

75-28-5 Isobutane

ErC 50 19.37 mg/l (Algae)

· **STOT-single exposure** May cause drowsiness or dizziness.· **11.2 Information on other hazards**· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information· **12.1 Toxicity**· **Aquatic toxicity:****109-66-0 pentane**EC50 10.7 mg/l (*Pseudokirchneriella subcapitata*) (72 hours)EC50 (48 hr) 2.7 mg/l (*Daphnia magna*)LC50 (96 hr) 4.26 mg/l (*Oncorhynchus mykiss*)NOEC (72 hr) 7.51 mg/l (*Pseudokirchneriella subcapitata*)**74-98-6 Propane liquefied**EC50 (48 hr) 69.43 mg/l (*Daphnia magna*)

LC50 (96 hr) 49.9 mg/l (Fish)

106-97-8 butane, pureEC50 (48 hr) 69.43 mg/l (*Daphnia magna*)

LC50 (96 hr) 49.9 mg/l (Fish)

75-28-5 IsobutaneEC50 (48 hr) 69.43 mg/l (*Daphnia magna*)

LC50 (96 hr) 91.42 mg/l (Fish)

· **12.2 Persistence and degradability** No further relevant information available.· **12.3 Bioaccumulative potential** No further relevant information available.· **12.4 Mobility in soil** No further relevant information available.· **12.5 Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.· **12.7 Other adverse effects**· **Remark:** Toxic for fish· **Additional ecological information:**· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

SECTION 13: Disposal considerations· **13.1 Waste treatment methods**· **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.· **Uncleaned packagings:**· **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN number or ID number · ADR, IMDG, IATA 	UN1950
<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA 	1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS AEROSOLS (PENTANES), MARINE POLLUTANT AEROSOLS, flammable
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR <div style="display: flex; align-items: center; gap: 10px;">   </div> <ul style="list-style-type: none"> · Class · Label 	2 5F Gases. 2.1
<ul style="list-style-type: none"> · IMDG <div style="display: flex; align-items: center; gap: 10px;">   </div> <ul style="list-style-type: none"> · Class · Label 	2.1 Gases. 2.1
<ul style="list-style-type: none"> · IATA <div style="display: flex; align-items: center; gap: 10px;">  </div> <ul style="list-style-type: none"> · Class · Label 	2.1 Gases. 2.1
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	Void
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): 	Product contains environmentally hazardous substances: pentane Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Kemler Number: · EMS Number: · Stowage Code · Segregation Code 	Warning: Gases. - F-D,S-U SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
<ul style="list-style-type: none"> · 14.7 Maritime transport in bulk according to IMO instruments 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: · ADR · Limited quantities (LQ) 	1L

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· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	D
<hr/>	
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category**
P3a FLAMMABLE AEROSOLS
E2 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **National regulations**
- **Technical instructions (air):**

Class	Share in %
III	1.1
NK	57.5

- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.
- **Department issuing data specification sheet:** Environment protection department
- **Abbreviations and acronyms:**
ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (UK REACH)
PNEC: Predicted No-Effect Concentration (UK REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Gas 1A: Flammable gases – Category 1A
Aerosol 1: Aerosols – Category 1
: Aerosols – Category 3
Press. Gas (Comp.): Gases under pressure – Compressed gas
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 4: Acute toxicity – Category 4
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

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Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Data compared to the previous version altered. *

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