

Safety data sheet

According to 1907/2006/EC, Article 31 REACH

Printing date 21.09.2018

Version: 4

Revision: 21.09.2018

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

1.1 Product identifier

Trade name: **ZEP 5U AERO**

Article number: 99240001

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

Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category PC24 Lubricants, greases, release products

Process category

PROC7 Industrial spraying

PROC11 Non industrial spraying

Application of the substance / the mixture Lubricant

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

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1.4 Emergency telephone number:

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UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

EU: Tel. 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

STOT SE 3 H336 May cause drowsiness or dizziness.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

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

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

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Hazard pictograms



GHS02

GHS07

GHS09

Signal word Danger

Hazard-determining components of labelling:

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Hazard statements

H222-H229 Extremely flammable aerosol. 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.

P273 Avoid release to the environment.

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 The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

EC number: 919-857-5 Reg.nr.: 01-2119463258-33-xxxx	Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336	75-100%
CAS: 110-25-8 EINECS: 203-749-3 Reg.nr.: 01-2119488991-20-xxxx	oleoylsarcosine Eye Dam. 1, H318 Aquatic Acute 1, H400 Acute Tox. 4, H332; Skin Irrit. 2, H315	0.1-1%
CAS: 95-38-5 EINECS: 204-414-9 Reg.nr.: 01-2119777867-13-xxxx	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol STOT RE 2, H373 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Acute Tox. 4, H302	0.1-1%

Ingredients according to Detergents Regulation 648/2004/EC For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

After swallowing: Seek immediate medical advice.

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.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information** Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Dispose 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 disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Keep away from heat and direct sunlight.
- **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
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 receptacle tightly sealed.
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

· 8.1 Control parameters

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

34590-94-8 Dipropylene glycol monomethyl ether (2.5-5%)

WEL (Great Britain) Long-term value: 308 mg/m³, 50 ppm
Sk

IOELV (European Union) Long-term value: 308 mg/m³, 50 ppm
Skin

124-38-9 carbon dioxide (0.1-1%)

WEL (Great Britain) Short-term value: 27400 mg/m³, 15000 ppm
Long-term value: 9150 mg/m³, 5000 ppm

IOELV (European Union) Long-term value: 9000 mg/m³, 5000 ppm

· DNELs

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Oral DNEL Long term-systemic 125 mg/kg human/day (consumer)

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Dermal	DNEL Long term-systemic	125 mg/kg human/day (consumer) 208 mg/kg human/day (worker)
Inhalative	DNEL Long term-systemic mg/m ³	900 mg/m ³ (consumer) 871 mg/m ³ (worker)

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

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· **Respiratory protection:** Filter AX

· **Protection of hands:**

· **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.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· **Not suitable are gloves made of the following materials:** Strong material gloves

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Aerosol

Colour: Light yellow

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: 162 °C

· **Flash point:** <0 °C

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:** 207 °C

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

Lower: 0.6 Vol %

Upper: 7 Vol %

· **Vapour pressure at 20 °C:** 1 hPa

· **Density at 20 °C:** 0.81 g/cm³

· **Relative density:** Not determined.

· **Vapour density:** Not determined.

· **Evaporation rate:** Not applicable.

· **Solubility in / Miscibility with water:**

Insoluble.

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

Dynamic: Not determined.

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Kinematic: Not determined.

· **Solvent content:**

Organic solvents: 88.0 %
EU-VOC: 725.8 g/l
EU-VOC 89.60 %
Swiss VOC: 89.60 %

Solids content: 12.0 %

· **9.2 Other information** No further relevant information available.

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 toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Oral	LD50	>5,000 mg/kg (Rat)
Dermal	LD50	>5,000 mg/kg (Rabbit)
Inhalative	LC50 / 4 h	4,951 mg/ltr (Rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard**
May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **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.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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· 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations

· Uncleaned packaging:

· Recommendation: Disposal in accordance with administrative provisions

SECTION 14: Transport information

· 14.1 UN-Number

· ADR, IMDG, IATA

UN1950

· 14.2 UN proper shipping name

· ADR

1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS

· IMDG

AEROSOLS (oleoylsarcosine), MARINE POLLUTANT

· IATA

AEROSOLS, flammable

· 14.3 Transport hazard class(es)

· ADR



· Class

2 5F Gases.

· Label

2.1

· IMDG



· Class

2.1

· Label

2.1

· IATA



· Class

2.1

· Label

2.1

· 14.4 Packing group

· ADR, IMDG, IATA

Void

· 14.5 Environmental hazards:

Product contains environmentally hazardous substances:
oleoylsarcosine

· Marine pollutant:

No

· Special marking (ADR):

Symbol (fish and tree)

Symbol (fish and tree)

· 14.6 Special precautions for user

Warning: Gases.

· Danger code (Kemler):

-

· EMS Number:

F-D,S-U

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· Stowage Code	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.
· Segregation Code	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.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	D
· 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

Reg. (EC) n. 1272/2008 - CLP;
 Reg. (EC) n. 1907/2006 – Reach;
 Reg. (EC) n. 2015/830 annex II of REACH;
 Reg. (EC) n. 648/04 (Detergents);
 Reg. (EC) n. 528/12 (Biocides BPR);
 Reg. (EC) n. 1223/2009 (Cosmetics);
 Dir. 06/08 ADR – RID - IMDG - IATA;
 Dir. 47/08 (Aerosols); Dir. 12/18 (Seveso III);
 Dir. 2008/98/CE and Reg. (EC) n.1357/2014 (Waste management)

· Directive 2012/18/EU

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· Seveso category

E2 Hazardous to the Aquatic Environment
 P3b FLAMMABLE AEROSOLS

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40

· National regulations:

· Technical instructions (air):

Class	Share in %
NK	75-100

· **Waterhazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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· Relevant phrases

H226 Flammable liquid and vapour.
 H302 Harmful if swallowed.
 H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H332 Harmful if inhaled.
 H336 May cause drowsiness or dizziness.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

· Department issuing SDS:

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IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61

UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (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)

VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Aerosol 1: Aerosols – Category 1

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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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Annex: Exposure scenario

- **Short title of the exposure scenario**

For the finished product.

ZEP 5U AERO

- **Sector of Use**

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

- **Product category** PC24 Lubricants, greases, release products

- **Process category**

PROC7 Industrial spraying

PROC11 Non industrial spraying

- **Description of the activities / processes covered in the Exposure Scenario** See section 1 of the annex to the Safety Data Sheet.

- **Conditions of use**

- **Duration and frequency** 5 workdays/week.

- **Physical parameters**

- **Physical state** Aerosol

- **Concentration of the substance in the mixture** The substance is main component.

- **Used amount per time or activity** According to directions for use.

- **Other operational conditions**

- **Other operational conditions affecting environmental exposure** Use only on hard ground.

- **Other operational conditions affecting worker exposure**

Take precautionary measures against static discharge.

Keep away from sources of ignition - No smoking.

- **Other operational conditions affecting consumer exposure** Keep out of the reach of children.

- **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.

- **Risk management measures**

- **Worker protection**

- **Organisational protective measures** No special measures required.

- **Technical protective measures**

Provide explosion-proof electrical equipment.

Use product only in enclosed systems.

Ensure that suitable extractors are available on processing machines

- **Measures for consumer protection**

Ensure adequate labelling.

Keep locked up and out of the reach of children.

- **Environmental protection measures**

- **Water** Do not allow to reach sewage system.

- **Soil** Prevent contamination of soil.

- **Disposal measures**

Disposal in accordance with administrative provisions

Ensure that waste is collected and contained.

- **Disposal procedures** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Waste type** Partially emptied and uncleaned packaging

- **Exposure estimation**

- **Consumer** Not relevant for this Exposure Scenario.

- **Guidance for downstream users** No further relevant information available.