

Safety data sheet

According to 1907/2006/EC, Article 31 REACH

Printing date 05.06.2017

Version: 3

Revision: 05.06.2017

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

· 1.1 Product identifier

· Trade name: **ZEPYNAMIC AC EU**

· Article number: 98460002

· 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 PC28 Perfumes, fragrances

· Process category PROC7 Industrial spraying

· 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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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.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms



GHS02

· Signal word Danger

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- **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
- **Precautionary statements**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 Do not pierce or burn, even after use.
P211 Do not spray on an open flame or other ignition source.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- **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:

CAS: 64-17-5 EINECS: 200-578-6 Reg.nr.: 01-2119457610-43-xxxx	ethanol ⚠ Flam. Liq. 2, H225	25-50%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 012119486944-21-xxxx	propane ⚠ Flam. Gas 1, H220 Press. Gas C, H280	10-25%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx	butane ⚠ Flam. Gas 1, H220 Press. Gas C, H280	5-10%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25-xxxx	propan-2-ol ⚠ Flam. Liq. 2, H225 ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	2.5-5%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane ⚠ Flam. Gas 1, H220 Press. Gas C, H280	2.5-5%
CAS: 132-27-4 EINECS: 205-055-6	sodium 2-biphenylate ⚠ Eye Dam. 1, H318 ⚠ Aquatic Acute 1, H400 ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335	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 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.

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.

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- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** 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:**

64-17-5 ethanol (25-50%)

WEL (Great Britain) Long-term value: 1920 mg/m³, 1000 ppm

106-97-8 butane (5-10%)

WEL (Great Britain) 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)

67-63-0 propan-2-ol (2.5-5%)

WEL (Great Britain) Short-term value: 1250 mg/m³, 500 ppm
Long-term value: 999 mg/m³, 400 ppm

- **DNELs**

64-17-5 ethanol

Oral	DNEL Long term-systemic	87 mg/kg human/day (consumer)
Dermal	DNEL Long term-systemic	206 mg/kg human/day (consumer)
		343 mg/kg human/day (worker)
Inhalative	DNEL Long term-systemic mg/m ³	114 mg/m ³ (consumer)
		950 mg/m ³ (worker)
	DNEL Long term local mg/m ³	950 mg/m ³ (consumer)
		1900 mg/m ³ (worker)

67-63-0 propan-2-ol

Oral	DNEL Long term-systemic	26 mg/kg human/day (consumer)
Dermal	DNEL Long term-systemic	319 mg/kg human/day (consumer)
		888 mg/kg human/day (worker)
Inhalative	DNEL Long term-systemic mg/m ³	89 mg/m ³ (consumer)
		500 mg/m ³ (worker)

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· **PNECs****64-17-5 ethanol**

PNEC Freshwater mg/L	0.96 mg/L (-)
PNEC Marinewater mg/L	0.79 mg/L (-)
PNEC Freshwater sediment	3.6 mg/Kg (-)
PNEC Marine water sediment	2.9 mg/Kg (-)
PNEC Intermittent release	2.75 mg/l (-)
PNEC Soil	0.63 mg/Kg (-)
PNEC Sewage treatment Plant mg/L	580 mg/L (-)

67-63-0 propan-2-ol

PNEC Freshwater mg/L	140.9 mg/L
PNEC Marinewater mg/L	140.9 mg/L
PNEC Freshwater sediment	552 mg/Kg
PNEC Marine water sediment	552 mg/Kg
PNEC Intermittent release	140.9 mg/L
PNEC Soil	28 mg/Kg

· **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:** Not required.· **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:	Colourless
Odour:	Like alcohol
Odour threshold:	Not determined.

· **pH-value:** Not determined.· **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	78 °C

· **Flash point:** < 23 °C· **Flammability (solid, gas):** Not applicable.· **Ignition temperature:** 365 °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.

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· Explosion limits:	
Lower:	1.7 Vol %
Upper:	15.0 Vol %
· Vapour pressure at 20 °C:	59 hPa
· Density at 20 °C:	0.89 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	55.9 %
EU-VOC:	832.9 g/l
EU-VOC	66.48 %
Swiss VOC:	66.51 %
Solids content:	0.1 %
· 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:**

64-17-5 ethanol

Oral	LD50	7060 mg/kg (Rat)
Inhalative	LC50 / 4 h	20000 mg/ltr (Rat)
	EC 50 / 48 h	10800 mg/ltr (Daphnia magna (water flea))

106-97-8 butane

Inhalative	LC50 / 4 h	658 mg/ltr (Rat)
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67-63-0 propan-2-ol

Oral	LD50	>5000 mg/kg (Rat)
Dermal	LD50	6290 mg/kg (rab)
Inhalative	LC50 / 4 h	30 mg/ltr (Rat)
	LC50/ 8 h	12000-19000 mg/m ³ (Rat)
	LC50 / 96 h	9640 mg/ltr (fish)
		>1400 mg/ltr (Lepomus gobbosus (Zonnebaars))
		6550 mg/ltr (Pimephales promelas)
	EC50 / 24 h	>1000 mg/ltr (Daphnia magna (water flea))
	EC 50 / 48 h	10000 mg/ltr (Pimephales promelas)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

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- **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 (carcinogenity, 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** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.



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.
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|---------------------|
| · 14.1 UN-Number | UN1950 |
| · ADR, IMDG, IATA | |
| · 14.2 UN proper shipping name | |
| · ADR | 1950 AEROSOLS |
| · IMDG | AEROSOLS |
| · IATA | AEROSOLS, flammable |
| · 14.3 Transport hazard class(es) | |
| · ADR | |
|  | |
| · Class | 2 5F Gases. |
| · Label | 2.1 |
| · IMDG, IATA | |
|  | |
| · Class | 2.1 |
| · Label | 2.1 |

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· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user · Danger code (Kemler): · 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.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code	1L Code: E0 Not permitted as Excepted Quantity 2 D
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1

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 P3a** FLAMMABLE AEROSOLS
 · **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 %
NK	50-75

· **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

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· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not 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.

· **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.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.

· **Department issuing SDS:**

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· **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)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Gas 1: Flammable gases – Category 1
Aerosol 1: Aerosols – Category 1
Press. Gas C: Gases under pressure – Compressed gas
Flam. Liq. 2: Flammable liquids – Category 2
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
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

· *** Data compared to the previous version altered.**