

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

Printing date 10.09.2019

Version number 3

Issue: 14.03.2019

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

#### · 1.1 Product identifier

· Trade name: **ENVIROCLEAN FRESH**

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

No further relevant information available.

· **Application of the substance / the mixture** Flush-water fluid for vacuum toilets

#### · 1.3 Details of the supplier of the safety data sheet

##### · Manufacturer/Supplier:

EVAC GmbH  
Feldstr. 124  
D - 22880 Wedel

Tel.: (+49)(0)41 03 91 68 0

Fax: (+49)(0)41 03 91 68 90

e-Mail: [evac-train@zodiacaerospace.com](mailto:evac-train@zodiacaerospace.com)

· **Further information obtainable from:** Department laboratory

· **1.4 Emergency telephone number:** Poison Centre Munich, Tel.: +49 89 19240

### SECTION 2: Hazards identification

#### · 2.1 Classification of the substance or mixture

##### · Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

#### · 2.2 Label elements

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

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

##### · Hazard pictograms



GHS07

· **Signal word** Warning

##### · Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

##### · Precautionary statements

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P337+P313 If eye irritation persists: Get medical advice/attention.

##### · 2.3 Other hazards

##### · Results of PBT and vPvB assessment

· **PBT:** Not applicable.

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 · **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

#### · 3.2 Mixture

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

#### · Dangerous components:

CAS: 34590-94-8 EINECS: 252-104-2 Reg.nr.: 01-2119450011-60	Dipropylene glycol monomethyl ether substance with a Community workplace exposure limit	≥10- <20%
CAS: 7173-51-5 EINECS: 230-525-2 Index number: 612-131-00-6 Reg.nr.: 01-2119945987-15	didecyldimethylammonium chloride Skin Corr. 1B, H314; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 2, H411; Acute Tox. 4, H302	≥1- <2.5%

#### · SVHC

None of the ingredients is listed.

#### · Regulation (EC) No 648/2004 on detergents / Labelling for contents

amphoteric surfactants	≥5 - <15%
cationic surfactants, phosphonates	<5%
perfumes (LIMONENE, CITRAL)	

 · **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

 · **General information** Immediately remove any clothing soiled by the product.

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

 · **After skin contact** Immediately rinse with water.

#### · After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

 · **After swallowing** Drink plenty of water and provide fresh air. Call for a doctor immediately.

#### · 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

 CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

#### · 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

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- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
- **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** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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**

WEL (Great Britain)	Long-term value: 308 mg/m <sup>3</sup> , 50 ppm Sk
IOELV (European Union)	Long-term value: 308 mg/m <sup>3</sup> , 50 ppm Skin

- **Regulatory information**  
 WEL (Great Britain): EH40/2011  
 IOELV (European Union): (EU) 2017/164
- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
 Wash hands before breaks and at the end of work.

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Avoid contact with the eyes.

- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves (EN 374)

- **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.

Because of the large variety of types, the instructions of the manufacturer must be observed.

- **Eye protection:**



Safety glasses

- **Body protection:** Protective work clothing.

### SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

<b>Form:</b>	Fluid
<b>Colour:</b>	turquoise
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not determined.

- **Change in condition**

<b>Melting point/freezing point:</b>	undetermined
<b>Initial boiling point and boiling range:</b>	100 °C

- **Flash point:** Not applicable

- **Flammability (solid, gaseous)** Not applicable.

- **Ignition temperature:** 207 °C

- **Decomposition temperature:** Not determined.

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

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**

<b>Lower:</b>	1.1 Vol %
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<b>Upper:</b>	14.0 Vol %
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density at 20 °C:</b>	1.06 g/cm <sup>3</sup> (DIN 51757)
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>dynamic:</b>	Not determined.
<b>kinematic:</b>	Not determined.
· <b>9.2 Other information</b>	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:**

**7173-51-5 didecyldimethylammonium chloride**

Oral	LD <sub>50</sub>	329 mg/kg (rat) (OECD 401)
Dermal	LD <sub>50</sub>	3,342 mg/kg (rabbit) (OECD 404)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**  
The product was not tested. The statements is derived from the characteristics of the single components.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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- **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:

##### 7173-51-5 didecyldimethylammonium chloride

LC <sub>50</sub> /96 h	0.49 mg/l (Brachydanio rerio) (OECD 203 (Fish, Acute Toxicity Test))
NOEC/72 h	0.013 mg/l (Pseudokirchneriella subcapitata)
NOEC/21 d	0.021 mg/l (Daphnia magna) (OECD 211)
EC <sub>50</sub> /48 h	0.029 mg/l (Daphnia magna) (OECD 202 (Daphnia sp. Acute Immobilisation Test))

#### · 12.2 Persistence and degradability

##### 7173-51-5 didecyldimethylammonium chloride

biodegradability	72 % (OECD 301 B) Leicht biologisch abbaubar
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· **Other Information:** No data available

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

#### · Additional ecological information:

· **According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 2006/11/EC:**

phosphoric compounds, organic

· **General notes:** Do not allow product to reach ground water, water course or sewage system.

#### · 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** Must be specially treated adhering to official regulations.

#### · Waste disposal key:

The allocation of the waste disposal key number is to be executed after the European refuse catalog industry and process specifically.

#### · Uncleaned packaging:

· **Recommendation:** Packaging may be reused or recycled after cleaning.

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· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

**SECTION 14: Transport information**

- **14.1 UN-Number**  
· ADR, ADN, IMDG, IATA not applicable
- **14.2 UN proper shipping name**  
· ADR, ADN, IMDG, IATA not applicable
- **14.3 Transport hazard class(es)**  
· ADR, ADN, IMDG, IATA  
· Class not applicable
- **14.4 Packing group**  
· ADR, IMDG, IATA not applicable
- **14.5 Environmental hazards:** Not applicable.
- **14.6 Special precautions for user** Not applicable.
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
- **UN "Model Regulation":** not applicable

**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.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **Regulation (EU) No 649/2012**

7173-51-5	didecyldimethylammonium chloride	Annex I Part 1
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- **National regulations**
- **Technical instructions (air):**

Class	Share in %
NK	≥10-<20

- **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**  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H400 Very toxic to aquatic life.

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H411 Toxic to aquatic life with long lasting effects.

**Classification according to Regulation (EC) No 1272/2008**

Skin corrosion/irritation

Serious eye damage/eye irritation

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· **Department issuing SDS:** Department laboratory· **Abbreviations and acronyms:**

ALD: Approximate Lethal Dose

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

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

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute 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.**