

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### AquaActiv PumpClean

Revision date: 15.12.2016

Product code:

Page 1 of 10

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

### 1.1. Product identifier

AquaActiv PumpClean

#### Further trade names

Product code: 40242, 43146, 51481

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

#### Use of the substance/mixture

decalcifier

#### Uses advised against

Any non-intended use.

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

Company name:	OASE GmbH	
Street:	Tecklenburger Straße 161	
Place:	D-48477 Hörstel	
Telephone:	+49 (5454) 800	Telefax: +49 (5454) 8090
e-mail:	info@oase-livingwater.com	
Contact person:	Markus Dreyer; Forschung und Entwicklung	Telephone: +49 (5454) 80450
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Internet:	www.oase-livingwater.com	
Responsible Department:	Dr. Gans-Eichler Chemieberatung GmbH Raesfeldstr. 22 D-48149 Münster	e-mail: info@tge-consult.de Tel.: +49 (0)251/924520-60 www.tge-consult.de

### 1.4. Emergency telephone number:

Beratungsstelle für Vergiftungserscheinung in Berlin: +49 (30) - 30686 790

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes skin irritation.

Causes serious eye damage.

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

#### Hazard components for labelling

glycolic acid

#### Signal word:

Danger

#### Pictograms:



#### Hazard statements

H315

Causes skin irritation.

H318

Causes serious eye damage.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### AquaActiv PumpClean

Revision date: 15.12.2016

Product code:

Page 2 of 10

#### Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.  
 P102 Keep out of reach of children.  
 P280 Wear protective gloves/protective clothing/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.  
 P310 Immediately call a POISON CENTER/doctor.

#### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.  
 The mixture need not be classified as corrosive in spite of the extreme pH.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
77-92-9	citric acid			10 - 20 %
	201-069-1			
	Eye Irrit. 2; H319			
79-14-1	glycolic acid			1 - 5 %
	201-180-5		01-2119485579-17	
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1B; H290 H332 H314			

Full text of H and EUH statements: see section 16.

#### Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH).

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Remove contaminated clothing immediately and dispose off safely.

##### After inhalation

Remove person to fresh air and keep comfortable for breathing. In case of respiratory tract irritation, consult a physician.

##### After contact with skin

Remove contaminated, saturated clothing immediately. Wash with plenty of water. In case of skin irritation, consult a physician.

##### After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

##### After ingestion

Rinse mouth. Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Call a physician immediately.

#### 4.2. Most important symptoms and effects, both acute and delayed

No information available.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### AquaActiv PumpClean

Revision date: 15.12.2016

Product code:

Page 3 of 10

#### **4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

dry extinguishing powder. Carbon dioxide (CO<sub>2</sub>). Water spray. Extinguishing powder. alcohol resistant foam.

##### **Unsuitable extinguishing media**

High power water jet.

#### **5.2. Special hazards arising from the substance or mixture**

Can be released in case of fire: Carbon monoxide Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>)

#### **5.3. Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.

#### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Co-ordinate fire-fighting measures to the fire surroundings.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment. (See section 8.)

Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.

Provide adequate ventilation.

#### **6.2. Environmental precautions**

Discharge into the environment must be avoided. Eliminate leaks immediately.

#### **6.3. Methods and material for containment and cleaning up**

Dilute with plenty of water.

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

#### **6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Wear suitable protective clothing. (See section 8.)

Provide adequate ventilation.

##### **Advice on protection against fire and explosion**

Usual measures for fire prevention.

Keep away from heat.

##### **Further information on handling**

Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.

General protection and hygiene measures: refer to chapter 8

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep container dry.

Keep/Store only in original container. Keep locked up. Keep out of the reach of children.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### AquaActiv PumpClean

Revision date: 15.12.2016

Product code:

Page 4 of 10

#### Advice on storage compatibility

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff

#### Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.  
Recommended storage temperature: 5-30°C  
Protect against: Light. UV-radiation/sunlight. heat. moisture.

#### 7.3. Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Additional advice on limit values

To date, no national critical limit values exist.

### 8.2. Exposure controls



#### Appropriate engineering controls

Provide adequate ventilation.

#### Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Remove contaminated clothing immediately and dispose off safely. Wash contaminated clothing before reuse.

#### Eye/face protection

Tightly sealed safety glasses. DIN EN 166

#### Hand protection

Pull-over gloves of rubber. DIN EN 374

Suitable material:

NBR (Nitrile rubber). (0,38 mm); penetration time (maximum wearing period): > 480 min

CR (polychloroprenes, Chloroprene rubber). (0,36 mm); penetration time (maximum wearing period): > 480 min

Butyl rubber. (0,65 mm); penetration time (maximum wearing period): > 240 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

#### Skin protection

Suitable protective clothing: Protective clothing.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

#### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

generation/formation of aerosols

Generation/formation of mist.

Suitable respiratory protective equipment: Combination filtering device (EN 14387) - Type : A-P2/3

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### AquaActiv PumpClean

Revision date: 15.12.2016

Product code:

Page 5 of 10

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

#### Environmental exposure controls

Do not empty into drains.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: liquid.  
 Colour: colourless  
 Odour: odourless

#### Test method

pH-Value: 1,5

#### Changes in the physical state

Melting point: not determined  
 Initial boiling point and boiling range: >100 °C  
 Sublimation point: not determined  
 Softening point: not determined  
 Pour point: not determined  
 Flash point: not determined  
 Sustaining combustion: Not sustaining combustion

#### Explosive properties

none

Lower explosion limits: not determined  
 Upper explosion limits: not determined  
 Ignition temperature: not determined  
 Decomposition temperature: not determined

#### Oxidizing properties

none

Vapour pressure: not determined  
 Density: 1,055 g/cm<sup>3</sup>  
 Water solubility: completely miscible  
 Viscosity / dynamic: not determined  
 Viscosity / kinematic: not determined  
 Flow time: not determined  
 Vapour density: not determined  
 Evaporation rate: not determined

### 9.2. Other information

Solid content: not determined

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No information available.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### AquaActiv PumpClean

Revision date: 15.12.2016

Product code:

Page 6 of 10

#### 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

#### 10.3. Possibility of hazardous reactions

No information available.

#### 10.4. Conditions to avoid

Protect against: Light. UV-radiation/sunlight. heat. Cold. moisture.

#### 10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Strong alkali

#### 10.6. Hazardous decomposition products

Can be released in case of fire: Carbon monoxide Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>)

#### Further information

No information available.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Toxicokinetics, metabolism and distribution

No information available.

##### Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
77-92-9	citric acid				
	oral	LD50 >5000 mg/kg	Mouse.	ECHA Dossier	
	dermal	LD50 >2000 mg/kg	Rat	ECHA Dossier	
79-14-1	glycolic acid				
	oral	LD50 >2000 mg/kg	Rat.	ECHA Dossier	
	inhalative vapour	ATE 11 mg/l			
	inhalative (4 h) aerosol	LC50 3,6 mg/l	Rat.,male. , OECD 403	ECHA Dossier	

##### Irritation and corrosivity

Causes skin irritation.

Causes serious eye damage.

Skin corrosion/irritation: not corrosive (OECD TG 431)

##### Sensitising effects

Based on available data, the classification criteria are not met.

##### Carcinogenic/mutagenic/toxic effects for reproduction

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### AquaActiv PumpClean

Revision date: 15.12.2016

Product code:

Page 7 of 10

Based on available data, the classification criteria are not met.

citric acid (CAS-No.: 77-92-9):

In-vivo mutagenicity: No experimental indications of mutagenicity in-vivo exist.

Literature information: ECHA Dossier

glycolic acid (CAS No. 79-14-1):

In vitro mutagenicity/genotoxicity: No experimental indications of mutagenicity in-vitro exist.

Reproductive toxicity:

Exposure time: 111d

Species: Rat.

Method: OECD Guideline 415

Result: NOEL = 600 mg/kg bw/day

Developmental toxicity/teratogenicity:

Exposure time: 21d

Species: Rat.

Method: OECD Guideline 414

Result: NOEL = 150 mg/kg bw/day

Literature information: ECHA Dossier

#### 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.

glycolic acid (CAS No. 79-14-1):

Subchronic oral toxicity:

Exposure time: 90d

Species: Rat.

Method: OECD Guideline 408

Result: NOEL = 150 mg/kg bw/day (70% sol)

Literature information: ECHA Dossier

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### Specific effects in experiment on an animal

No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
77-92-9	citric acid					
	Acute fish toxicity	LC50 440 (48h) mg/l	96 h	Leuciscus idus melanotus (OECD 203)	ECHA Dossier	
	Acute crustacea toxicity	EC50 1535 (24h) mg/l	48 h	Daphnia magna	ECHA Dossier	
79-14-1	glycolic acid					
	Acute fish toxicity	LC50 164 mg/l	96 h	Pimephales promelas	ECHA Dossier	
	Acute crustacea toxicity	EC50 141 mg/l	48 h	daphnia magna	ECHA Dossier	

### 12.2. Persistence and degradability

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### AquaActiv PumpClean

Revision date: 15.12.2016

Product code:

Page 8 of 10

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
77-92-9	citric acid			
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C	97 %	28	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			

#### **12.3. Bioaccumulative potential**

No indication of bioaccumulation potential.

#### **12.4. Mobility in soil**

No data available.

#### **12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### **12.6. Other adverse effects**

No data available.

#### **Further information**

Do not allow to enter into surface water or drains.

### SECTION 13: Disposal considerations

#### **13.1. Waste treatment methods**

##### **Advice on disposal**

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to EAKV:

##### **Waste disposal number of waste from residues/unused products**

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

##### **Waste disposal number of used product**

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

##### **Waste disposal number of contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

##### **Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.

### SECTION 14: Transport information

#### **Land transport (ADR/RID)**

##### **14.1. UN number:**

No dangerous good in sense of this transport regulation.

##### **14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

##### **14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

##### **14.4. Packing group:**

No dangerous good in sense of this transport regulation.

#### **Inland waterways transport (ADN)**

##### **14.1. UN number:**

No dangerous good in sense of this transport regulation.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### AquaActiv PumpClean

Revision date: 15.12.2016

Product code:

Page 9 of 10

- 14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### Marine transport (IMDG)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### Air transport (ICAO-TI/IATA-DGR)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

refer to chapter 6-8

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### EU regulatory information

- 2010/75/EU (VOC): No information available.  
 2004/42/EC (VOC): No information available.  
 Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

##### Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].  
 REACH 1907/2006 Appendix XVII: 3

##### National regulatory information

- Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).  
 Water contaminating class (D): 1 - slightly water contaminating

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### Changes

- Rev. 1,00; 02.07.2014 Initial release  
 Rev. 1,01; 15.10.2014 Changes in chapter: 2 (revision of the classification, Precautionary Statements:), 4, 6, 7, 8, 16.  
 Rev. 1,1; 15.12.2016, Changes in chapter: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 14, 15, 16.

#### Abbreviations and acronyms

- ADR: Accord européen sur le transport des marchandises dangereuses par Route  
 CAS Chemical Abstracts Service

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**AquaActiv PumpClean**

Revision date: 15.12.2016

Product code:

Page 10 of 10

DNEL: Derived No Effect Level  
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)  
LOAEL: Lowest observed adverse effect level  
LOAEC: Lowest observed adverse effect concentration  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
NOAEL: No observed adverse effect level  
NOAEC: No observed adverse effect level  
NTP: National Toxicology Program  
N/A: not applicable  
OSHA: Occupational Safety and Health Administration  
PNEC: predicted no effect concentration  
PBT: Persistent bioaccumulative toxic  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail )  
SARA: Superfund Amendments and Reauthorization Act  
SVHC: substance of very high concern  
TRGS Technische Regeln für Gefahrstoffe  
TSCA: Toxic Substances Control Act  
VOC: Volatile Organic Compounds  
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe  
WGK: Wassergefährdungsklasse

**Relevant H and EUH statements (number and full text)**

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

**Further Information**

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:  
Health hazards: Calculation method.  
Environmental hazards: Calculation method.  
Physical hazards: On basis of test data. and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*