according to Regulation (EC) No 1907/2006

Anti-Algae (greenwater clarifier)

Revision date: 08.02.2017

Product code: 47260\_46018

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

## 1.1. Product identifier

Anti-Algae (greenwater clarifier)

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

Use of the substance/mixture

Water treatment chemicals

## 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 16	1	
Place:	D-48477 Hörstel		
Telephone:	+49 (5454) 800		Telefax:+49 (5454) 8090
e-mail:	info@oase-livingwater.co	m	
Contact person:	Markus Dreyer; Forschun	ig und	Telephone:+49 (5454) 80450
	Entwicklung		
e-mail:	m.dreyer@oase-livingwat	ter.com	
Internet:	www.oase-livingwater.cor	n	
Responsible Department:	Dr. Gans-Eichler	e-mail: info@t	ge-consult.de
	Chemieberatung GmbH	Tel.: +49 (0)2	51/924520-60
	Raesfeldstr. 22	www.tge-cons	ult.de
	D-48149 Münster		
1.4. Emergency telephone	Beratungsstelle für Vergif	tungserscheinun	ig in Berlin: +49 (30) - 30686 790
www.heau			

#### <u>number:</u>

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008 Hazard categories:

Serious eye damage/eye irritation: Eye Dam. 1 Hazard Statements: Causes serious eye damage.

## 2.2. Label elements

## Regulation (EC) No. 1272/2008

Hazard components for labelling (+)-tartaric acid salicylic acid

Signal word: Pictograms:



Hazard statements

H318

Causes serious eye damage.

## 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.



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# Anti-Algae (greenwater clarifier) Revision date: 08.02.2017 Product code: 47260\_46018 Page 2 of 10 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. Immediately call a POISON CENTER/doctor. 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.

## **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name				
	EC No	REACH No			
	Classification according to Regulati	on (EC) No. 1272/2008 [CLP]	•		
87-69-4	(+)-tartaric acid		10 - < 15 %		
	201-766-0				
	Eye Dam. 1; H318				
69-72-7	salicylic acid			10 - < 15 %	
	200-712-3				
	Acute Tox. 4, Eye Dam. 1; H302 H3				

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).

#### After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

#### After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

#### 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 thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Treat symptomatically.

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

#### 5.1. Extinguishing media



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## Suitable extinguishing media

Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Water fog.

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 (CO2). Hydrogen chloride (HCI)

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

#### 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

Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Wear personal protection equipment (refer to section 8).

#### 6.2. Environmental precautions

Discharge into the environment must be avoided.

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

Take up mechanically. 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 personal protection equipment (refer to section 8).

## Advice on protection against fire and explosion

Usual measures for fire prevention. Dust clouds may present an explosion hazard.

#### Further information on handling

Avoid generation of dust. 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.

#### 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 absorbtion of humidity.

Recommended storage temperature: 0-50°C

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

## 7.3. Specific end use(s)



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refer to chapter 1.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
-	Aluminium salts, soluble	-	2		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

## **DNEL/DMEL** values

CAS No	Substance				
DNEL type		Exposure route	Effect	Value	
12042-91-0 dialuminium chloride pentahydroxide					
Worker DNEL, long-term		inhalation	systemic	7,1 mg/m³	

#### 8.2. Exposure controls

#### Appropriate engineering controls

Dust should be exhausted directly at the point of origin.

## 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.

#### Eye/face protection

Dust protection goggles.

#### Hand protection

Wear suitable gloves. Suitable material: FKM (fluororubber). - Thickness of glove material: 0,4 mm Breakthrough time >= 8 h Butyl rubber. - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm Breakthrough time >= 8 h PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

#### Skin protection

Suitable protective clothing: Lab apron.

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

## **Respiratory protection**

With correct and proper use, and under normal conditions, breathing protection is not required. Respiratory protection necessary at:

-In the case of the formation of dust.

Suitable respiratory protective equipment: particulates filter device (DIN EN 143). Type P1-3 The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates)



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Test method

that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used!

## Environmental exposure controls

No special precautionary measures are necessary.

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	white - grey
Odour:	characteristic

pH-Value:	not determined
Changes in the physical state	
Melting point:	not determined
Initial boiling point and boiling range:	not determined
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
Auto-ignition temperature	
Solid:	not determined
Decomposition temperature:	not determined
Oxidizing properties none	
Vapour pressure:	not determined
Density (at 20 °C):	1,3 g/cm³
Bulk density:	not determined
Water solubility:	very soluble
Solubility in other solvents not determined	
Partition coefficient:	not determined
Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Flow time:	not determined
Vapour density:	not determined
Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined
2 Other information	

## 9.2. Other information



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Solid content:

not determined

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

No information available.

## 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: UV-radiation/sunlight. heat.

## 10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

## 10.6. Hazardous decomposition products

Can be released in case of fire: Carbon monoxide, Carbon dioxide (CO2). Hydrogen chloride (HCI)

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

## Toxicocinetics, metabolism and distribution

No data available.

#### Acute toxicity

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

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
87-69-4	(+)-tartaric acid			-		
	oral	LD50 5000 mg/kg	2000-	Rat	ECHA Dossier	OECD 423
	dermal	LD50 mg/kg	>2000	Rat	ECHA Dossier	OECD 402
69-72-7	salicylic acid					
	oral	LD50 mg/kg	891	Rat (OECD 401)	ECHA Dossier	
	dermal	LD50 mg/kg	>2000	Rat (OECD 402)	ECHA Dossier	

## Irritation and corrosivity

Causes serious eye damage. Skin corrosion/irritation: Based on available data, the classification criteria are not met. No data available.

## Sensitising effects

Based on available data, the classification criteria are not met. No data available.

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



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Based on available data, the classification criteria are not met. (+)-tartaric acid (CAS No. 87-69-4 ): Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study) Species: Rat Result / evaluation: NOAEL = 181 mg/kg(bw)/day Literature information: ECHA Dossier

salicylic acid (CAS No. 69-72-7):

In vitro mutagenicity/genotoxicity: Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay) Result / evaluation: negative. Method: OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) Result / evaluation: negative. Method: OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) Result / evaluation: negative. Literature information: ECHA Dossier Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study) Result / evaluation: NOAEL = 75 mg/kg Literature information: ECHA Dossier

## STOT-single exposure

Based on available data, the classification criteria are not met. No data available.

## STOT-repeated exposure

Based on available data, the classification criteria are not met. No data available.

## Aspiration hazard

Based on available data, the classification criteria are not met. No data available.

#### Specific effects in experiment on an animal

No data available.

## **SECTION 12: Ecological information**

## 12.1. Toxicity

#### No data available.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
87-69-4	(+)-tartaric acid						
	Acute fish toxicity	LC50 mg/l	>100	96 h	Danio rerio	ECHA Dossier	OECD 203
69-72-7	salicylic acid						
	Acute algae toxicity	ErC50	100 mg/l		Scenedesmus subspicatus (OECD 201)	ECHA Dossier	
	Acute crustacea toxicity	EC50	870 mg/l		Daphnia magna (OECD 202)	ECHA Dossier	
	Crustacea toxicity	NOEC	10 mg/l	21 d	Daphnia magna	MSDS external.	

## 12.2. Persistence and degradability

No data available.



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CAS No	Chemical name	Chemical name						
	Method	Method Value d Source						
	Evaluation		-	-				
87-69-4	(+)-tartaric acid							
	other guideline	85%	28	ECHA Dossier				
	Product is biodegradable.							
69-72-7	salicylic acid							
	OECD 301C / ISO 9408 / EEC 92/69 annex V, C.4-F >60% 14 ECHA Dossier							
	Product is biodegradable.							

#### 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
69-72-7	salicylic acid	2,25

#### 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 Classified as 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 Classified as hazardous waste.

## Waste disposal number of contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

#### **Contaminated packaging**

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

## **SECTION 14: Transport information**

#### Land transport (ADR/RID)



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<u>14.1. UN number:</u>	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)		
<u>14.1. UN number:</u>	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.	
Marine transport (IMDG)		
<u>14.1. UN number:</u>	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)		
<u>14.1. UN number:</u>	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 Anne	x II of Marpol and the IBC Code	
not relevant		
SECTION 15: Regulatory information		
15.1. Safety, health and environmental reg	gulations/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 hazardou REACH 1907/2006 Appendix XVII, N	us according to regulation (EC) No 1272/2008 [CLP]. No (mixture): 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 su	bstances in this mixture were not carried out	

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

## **SECTION 16: Other information**

## Changes



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## Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route CAS Chemical Abstracts Service 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) H302 Harmful if swallowed. H318 Causes serious eye damage.

## **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.)