

Dissolved Oxygen No. 1

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

1.1 - Product identifier

Trade name/designation Dissolved Oxygen No. 1

Chemical name

Product-type Mixture

Product code FN02-0019-000

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

Relevant identified uses - Reagent for water analysis

Uses advised against - Other

1.3 - Details of the supplier of the safety data sheet

MDE GmbH & Co. KG

Benzstr. 20

82178 Puchheim

Telephone : +49 (0)89 800 72 802

Email: msds@finwell-products.com

1.4 - Emergency telephone number

- Poison Control Center Munich

Tel: +49 (0) 89 / 19 24 0

Germany

24 hour service

Languages: German, English

please also call from: United Kingdom

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Aquatic Chronic 3	Hazardous to the aquatic environment - Aquatic Chronic 3
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2.2 - Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word : None

Pictograms : None

Hazard statements

H412	Harmful to aquatic life with long lasting effects
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Precautionary statements

P273	Avoid release to the environment.
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P501	Dispose of contents, container to an appropriate recycling or disposal facility.
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EUH-phrases : None

2.3 - Other hazards

PBT-substance. - No information available.

vPvB-substance. - No information available.

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Other hazards which do not result in classification - No information available.

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No	%	Class	Spec. concentrations
Manganese chloride tetrahydrate	CAS No. : 13446-34-9 Index No. : EC No. : 231-869-6	10 - 20	Acute Tox. 4 Oral - H302 Aquatic Chronic 2 - H411	Not applicable
sulphamidic acid, sulphamic acid, sulfamic acid	CAS No. : 5329-14-6 Index No. : 016-026-00-0 EC No. : 226-218-8 REACH No. : 01-2119488633-28-XXXX	1 - 5	Aquatic Chronic 3 - H412 Eye Irrit. 2 - H319 Skin Irrit. 2 - H315	Not applicable

SECTION 4: First aid measures

4.1 - Description of first aid measures

<u>Following inhalation</u>	- No special measures are necessary. - Provide fresh air.
<u>Following skin contact</u>	- Wash immediately with: Water - When in doubt or if symptoms are observed, get medical advice.
<u>After eye contact</u>	- Rinse immediately carefully and thoroughly with eye-bath or water. - In case of eye irritation consult an ophthalmologist.
<u>After ingestion</u>	- Rinse mouth thoroughly with water. - Do NOT induce vomiting.

4.2 - Most important symptoms and effects, both acute and delayed

<u>Symptoms and effects - Following inhalation</u>	- No information available.
<u>Symptoms and effects - Following skin contact</u>	- No information available.
<u>Symptoms and effects - After eye contact</u>	- No information available.
<u>Symptoms and effects - After ingestion</u>	- No information available.

4.3 - Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 - Extinguishing media

<u>Suitable extinguishing media</u>	- ABC-powder - Carbon dioxide (CO2) - Foam - Extinguishing powder
<u>Unsuitable extinguishing media</u>	- Full water jet

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5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture - No information available.

Hazardous decomposition products

- Carbon dioxide (CO₂)
- Carbon monoxide
- metallic oxides containing heavy metals
- Sulphur oxides
- Nitrogen oxides (NO_x)

5.3 - Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Use personal protection equipment.
- Provide adequate ventilation.

For emergency responders - No information available.

6.2 - Environmental precautions

- Do not allow to enter into surface water or drains.
- Ensure waste is collected and contained.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment - No information available.

Methods and material for cleaning up

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

Inappropriate techniques - No information available.

6.4 - Reference to other sections

- Disposal: see section 13
- Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation - No special technical protective measures are necessary.

Advices on general occupational hygiene - No information available.

7.2 - Conditions for safe storage, including any incompatibilities

- No information available.

7.3 - Specific end use(s)

- Reagent for water analysis

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SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

- No information available.

8.2 - Exposure controls

Appropriate engineering controls

- No information available.

Individual protection measures, such as personal protective equipment

- Suitable protective clothing: lab coat

- Suitable eye protection: Eye glasses with side protection

- When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

- Suitable material: NBR (Nitrile rubber)



SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

<u>Physical state</u>	Liquid	<u>Appearance</u>	Liquid
<u>Colour</u>	pink	<u>Odour</u>	odourless
Odour threshold		No data available	
pH		No data available	
Melting point		No data available	
Freezing point		No data available	
Boiling point		No data available	
Flash point		No data available	
Evaporation rate		No data available	
flammability		No data available	
Lower explosion limit		No data available	
Upper explosion limit		No data available	
Vapour pressure		No data available	
Vapour density		No data available	
Relative density		No data available	
Density		No data available	
Solubility (Water)		100 %	
Solubility (Ethanol)		No data available	

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Solubility (Acetone)	No data available
Solubility (Organic solvents)	No data available
Log KOC	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available

9.2 - Other information

VOC content	No data available
Minimum ignition energy	No data available
Conductivity	No data available

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

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

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- No information available.

10.5 - Incompatible materials

- No information available.

10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 - Information on toxicological effects

Acute toxicity - Not classified

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

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

Toxicity : Substances

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sulphamidic acid, sulphamic acid, sulfamic acid (5329-14-6)	
LD50 dermal (rat)	> 2000 mg/kg
Manganese chloride tetrahydrate (13446-34-9)	
LD50 oral (rat)	1484 mg/kg RTECS

<u>Skin corrosion/irritation</u>	- Not classified
<u>Serious eye damage/eye irritation</u>	- Not classified
<u>Respiratory or skin sensitisation</u>	- Not classified
<u>Germ cell mutagenicity</u>	- Not classified
<u>Carcinogenicity</u>	- Not classified
<u>Reproductive toxicity</u>	- Not classified
<u>STOT-single exposure</u>	- Not classified
<u>STOT-repeated exposure</u>	- Not classified
<u>Aspiration hazard</u>	- Not classified

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	No data available
LC50 96 hr fish	No data available
ErC50 algae	No data available
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

Toxicity : Substances

sulphamidic acid, sulphamic acid, sulfamic acid (5329-14-6)	
EC50 48 hr crustacea	71,6 mg/l
LC50 96 hr fish	70,3 mg/l
ErC50 algae	48 mg/l
Manganese chloride tetrahydrate (13446-34-9)	
EC50 48 hr crustacea	4,7 mg/l Daphnia magna

- Harmful to aquatic life with long lasting effects.

12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available
Chemical oxygen demand (COD)	No data available

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% of biodegradation in 28 days	No data available
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- No information available.

12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOC	No data available

- No indication of bioaccumulation potential.

12.4 - Mobility in soil

- No information available.

12.5 - Results of PBT and vPvB assessment

- No information available.

- No information available.

12.6 - Other adverse effects

- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods - Dispose of waste according to applicable legislation.

Sewage disposal - Do not empty into drains.

Special precautions for waste treatment - No information available.

Community or national or regional provisions - Dispose according to legislation.

SECTION 14: Transport information

14.1 - UN number

Not applicable

14.2 - UN proper shipping name

14.3 - Transport hazard class(es)

ADR subsidiary risks - No information available.

14.4 - Packing group

14.5 - Environmental hazards

Additional information - No dangerous good in sense of these transport regulations.

14.6 - Special precautions for user

14.7 - Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

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Substances REACH candidates None

Substances Annex XIV None

Substances Annex XVII None

VOC content No data available

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - No information available.

SECTION 16: Other information

SDS versions

Version	Issue date	Description of the amendments
1	08.04.2019	MSDS creation

Abbreviations and acronyms - See overview table at www.euphrac.eu

Texts of the regulatory sentences

Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment - Aquatic Chronic 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Aquatic Chronic 3
Eye Irrit. 2	Eye irritation - Category 2
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
Skin Irrit. 2	Irritation, Category 2

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.

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