

SAFETY DATA SHEET

OTEC EF 3-0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: OTEC EF 3-0
Product no.: OT21000

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

Relevant identified uses of the substance or mixture: Electrolyte
Restricted to professional users.
Uses advised against : None known.

1.3. Details of the supplier of the safety data sheet

Company and address: **Aktiv Guld A/S**
Vallensbækvej 46
2625 Vallensbæk
Denmark
+45 43 66 20 00
<https://www.aktivguld.com/>
E-mail: ag@aktivguld.com
Revision: 03/09/2025
SDS Version: 3.0
Date of previous version: 08/08/2025 (3.0)

1.4. Emergency telephone number

Contact the poison hotline: +45 82 12 12 12 (24 hour service)
See section 4 "First aid measures".

SECTION 2: HAZARDS IDENTIFICATION

Classified according to Regulation (EC) No. 1272/2008 (CLP).

2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.
Eye Dam. 1; H318, Causes serious eye damage.
Carc. 2; H351, Suspected of causing cancer.
Repr. 2; H361, Suspected of damaging fertility or the unborn child.
Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s):



Signal word:

Danger

Hazard statement(s):

Causes skin irritation. (H315)
Causes serious eye damage. (H318)
Suspected of causing cancer. (H351)
Suspected of damaging fertility or the unborn child. (H361)
Harmful to aquatic life with long lasting effects. (H412)

Precautionary statement(s):

General:

Not applicable.

Prevention:

Obtain special instructions before use. (P201)
Wash hands and exposed skin thoroughly after handling. (P264)
Wear face protection/protective gloves/protective clothing. (P280)

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
IF exposed or concerned: Get medical advice/attention. (P308+P313)

Storage:

Not applicable.

Disposal:

Dispose of contents/container in accordance with local regulation. (P501)

Hazardous substances:

thiourea;thiocarbamide
Sodium N-(2-carboxyethyl)-N-(2-ethylhexyl)- β -alaninate
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine

▼ *Additional labelling:*

2.3. Other hazards

Additional warnings:

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated

Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Isotridecanol, ethoxylated	CAS No.: 69011-36-5 EC No.: 500-241-6 REACH: 01-2119976362-32-XXXX Index No.:	>5-<10%	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412	[19]
thiourea;thiocarbamide	CAS No.: 62-56-6 EC No.: 200-543-5 REACH: 01-2119977062-37-XXXX Index No.: 612-082-00-0	>5-≤10%	Acute Tox. 4, H302 Carc. 2, H351 Repr. 2, H361 Aquatic Chronic 2, H411	
Ammonium thiocyanate	CAS No.: 1762-95-4 EC No.: 217-175-6 REACH: 01-2119543696-28-XXXX Index No.:	>5-≤10%	EUH032 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Aquatic Chronic 3, H412	
Sodium N-(2-carboxyethyl)-N-(2-ethylhexyl)-β-alaninate	CAS No.: 94441-92-6 EC No.: 305-318-6 REACH: Index No.:	≥3-≤5%	Eye Dam. 1, H318	
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine	CAS No.: 121617-08-1 EC No.: 695-726-3 REACH: Index No.:	≥1-≤2,5%	Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information:

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation:

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact:

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact:

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion:

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.
In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns:

Not applicable.

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

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.1. ▼ Extinguishing media

Not applicable.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Sulphur oxides

Nitrogen oxides (NO_x)

Carbon oxides (CO / CO₂)

Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the chemical emergency services on 72 85 20 00 (24 h service) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Avoid direct contact with the product.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material: Keep only in original packaging.

Storage conditions: Store securely, out of the reach of children and not together with food, feed, medicines etc. Should be stored in tightly closed original packaging.

Incompatible materials: Water
Acid

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

thiourea;thiocarbamide is included in the national list of substances suspected of causing cancer

BEK no. 290 of 19/03/2024 on measures to prevent the risk when working with carcinogenic, mutagenic or reproductively toxic substances and materials.

DNEL

Ammonium thiocyanate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	2 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	4 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	700 µg/m ³
Long term – Systemic effects - Workers	Inhalation	2.8 mg/m ³
Long term – Systemic effects - General population	Oral	200 µg/kg bw/day

Isotridecanol, ethoxylated

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	93.8 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	263 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	6.53 mg/m ³

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Long term – Systemic effects - Workers	Inhalation	37 mg/m ³
Long term – Systemic effects - General population	Oral	2.5 mg/kg bw/day

Sodium N-(2-carboxyethyl)-N-(2-ethylhexyl)-β-alaninate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	8.3 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	13.9 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	29 mg/m ³
Long term – Systemic effects - Workers	Inhalation	97.8 mg/m ³
Long term – Systemic effects - General population	Oral	8.3 mg/kg bw/day

thiourea;thiocarbamide

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	1.7 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	4.81 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	100 µg/m ³
Long term – Systemic effects - Workers	Inhalation	1 mg/m ³
Long term – Systemic effects - General population	Oral	100 µg/kg bw/day

PNEC

Ammonium thiocyanate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		95 µg/L
Freshwater sediment		543 µg/kg
Intermittent release (freshwater)		27.2 µg/L
Marine water		9.5 µg/L
Marine water sediment		54.3 µg/kg
Predators		1.667 mg/kg
Sewage treatment plant		30 mg/L
Soil		6.336 mg/kg

Isotridecanol, ethoxylated

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		4.36 µg/L
Freshwater sediment		119.4 µg/kg
Intermittent release (freshwater)		5.44 µg/L
Intermittent release (marine water)		544 ng/L
Marine water		436 ng/L
Marine water sediment		11.94 µg/kg

Sewage treatment plant		4.35 mg/L
Soil		21.3 µg/kg

Sodium N-(2-carboxyethyl)-N-(2-ethylhexyl)-β-alaninate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		481 µg/L
Freshwater sediment		5.92 mg/kg
Intermittent release (freshwater)		1 mg/L
Marine water		48.1 µg/L
Marine water sediment		592 µg/kg
Sewage treatment plant		2.46 mg/L
Soil		901 µg/kg

thiourea;thiocarbamide

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		10 µg/L
Freshwater sediment		72.5 µg/kg
Intermittent release (freshwater)		38 µg/L
Marine water		1 µg/L
Marine water sediment		7.25 µg/kg
Sewage treatment plant		380 µg/L
Soil		2.725 mg/kg

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

General recommendations:

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios:

There are no exposure scenarios implemented for this product.

Exposure limits:

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures:

Do not recirculate outlet air that contain the substances.

Ensure that eyewash stations and safety showers are located within easy reach.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures:

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure:

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment


Generally:

In the event the work process is within scope of the Danish statutory order on work with code numbered products (Work Inspectorate Order no. 302/1993), then personal protection equipment shall be selected as set out herein. If applicable, please refer to the code number of this product in section 15. Use only CE marked protective equipment.


Respiratory Equipment:

Type	Class	Colour	Standards	
Respiratory protection is not needed in the event of adequate ventilation.				


Skin protection:

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	

Hand protection:

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
If the glove is spilled, change it immediately and wash your hands with soap and water. Wash hands at the end of each work session. Use barrier cream / pre work cream.	Nitrile	0,5	> 480	EN374-2, EN16523-13, EN388	

Eye protection:

Type	Standards	
Face shield alternatively safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<i>Physical state:</i>	Liquid
<i>Colour:</i>	Yellowish
<i>Odour / Odour threshold:</i>	No data available.
<i>pH:</i>	6,5-8
<i>Density (g/cm³):</i>	No data available.
<i>Kinematic viscosity:</i>	No data available.
<i>Particle characteristics:</i>	Does not apply to liquids.

Phase changes

<i>Melting point/Freezing point (°C):</i>	No data available.
<i>Softening point/range (°C):</i>	Does not apply to liquids.
<i>Boiling point (°C):</i>	No data available.
<i>Vapour pressure:</i>	No data available.
<i>Relative vapour density:</i>	No data available.
<i>Decomposition temperature (°C):</i>	No data available.

Data on fire and explosion hazards

<i>Flash point (°C):</i>	No data available.
<i>Flammability (°C):</i>	No data available.
<i>Auto-ignition temperature (°C):</i>	No data available.
<i>Lower and upper explosion limit (% v/v):</i>	No data available.

Solubility

<i>Solubility in water:</i>	Completely soluble
<i>n-octanol/water coefficient (LogKow):</i>	No data available.
<i>Solubility in fat (g/L):</i>	No data available.

9.2. Other information

<i>Other physical and chemical parameters:</i>	No data available.
<i>Oxidizing properties:</i>	No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Water

Acid

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

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

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

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

Skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

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.

11.2. Information on other hazards

Long term effects

Carcinogenic effects: This product contains substances considered or proven to be carcinogenic. The carcinogenic effects may be triggered subsequent to exposure through inhalation, skin contact or ingestion.

Reproductive toxicity: This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders. This product contains reprotoxic substances, which may harm the reproductive capacity. Adverse effects include: sterility, effects on the sexual function, lowered effective fertility and dysfunctional menstrual cycle.

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

thiourea;thiocarbamide has been classified by IARC as a group 3 carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 7 – Carcinogenic

HP 10 – Toxic for reproduction

Dispose of contents/container to an approved waste disposal plant.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code: Not applicable.

Specific labelling

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informat ion:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: REGULATORY INFORMATION

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

Restrictions for application:

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education:

No specific requirements.

<i>SEVESO - Categories / dangerous substances:</i>	Not applicable.
<i>Regulation on work involving coded products:</i>	Code number (1993): 00-4
<i>Additional information:</i>	Not applicable.
<i>Sources:</i>	The Danish Working Environment Authority's executive order no. 1049 of 30 May 2021 on young people's work. Based on Council Directive 94/33 / EC of 22 June 1994 on the protection of young people at work. Pregnant workers and workers who are breastfeeding (AT Guide A.1.8-6, amended 2024). Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste. Arbejdstilsynets bekendtgørelse nr. 301 af 13. maj 1993 om fastsættelse af kodenumre med senere ændringer. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

EUH032, Contact with acids liberates very toxic gas.
H302, Harmful if swallowed.
H312, Harmful in contact with skin.
H314, Causes severe skin burns and eye damage.
H318, Causes serious eye damage.
H332, Harmful if inhaled.
H351, Suspected of causing cancer.
H361, Suspected of damaging fertility or the unborn child.
H400, Very toxic to aquatic life.
H411, Toxic to aquatic life with long lasting effects.
H412, Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

Aktiv Guld A/S

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product.

Information in this safety data sheet cannot be used as a product specification.

Country-language: DK-en