

FOT Biocontrol



Safety data sheet according to Regulation (EC) No. 1907/2006 (REACH)
Regulation (EU) 2020/878

Product name:	FOT Biocontrol
Revision date:	03-04-2023 (version 9.0)
Print date:	03-04-2023

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifiers

Registration no. CTGB(NL): 15145N
Identification of the substance or mixture: FOT Biocontrol

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

Preservative
Industrial use

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/downstream user/distributor)

Vecom Marine B.V.

Mozartlaan 3
3144 NA Maassluis
The Netherlands

Telephone: +31 (0) 10-5930210
Website: www.vecom-marine.com
Email: sales@vecom-marine.com

1.4. Emergency telephone number

National Poisons Information Centre (NVIC): +31 (0)88-755-8000 (24 hour service) Only intended to inform professional emergency services in case of acute poisoning. See section 4 on first aid measures.

2. Hazards identification

2.1. Classification of the substance or mixture

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Met. Corr. 1 / H290	Corrosive to metals	May be corrosive to metals.
Skin Corr. 1C / H314	Skin corrosion/irritation	Causes severe skin burns and eye damage.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic organisms.
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting effects.

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2.2. Label elements

*

The product is classified and labelled according to EC directives or corresponding national laws.

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



Danger

Hazard statements

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe vapour.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye/face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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 or doctor/ physician.
P391	Collect spillage.

Hazard components for labelling

reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)

Supplemental hazard information

not applicable

2.3. Other hazards

Contains no endocrine disruptor (EDC) at a concentration of ≥ 0.1 %
Does not contain a PBT/vPvB substance in a concentration of ≥ 0.1 %

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3. Composition/information on ingredients

3.1. Substances

Not relevant (composition)

3.2. Mixtures

Description Biocide

*

Hazardous ingredients

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

EC No. CAS No Index No.	REACH No. Designation Classification: // Remark	Weight- %
55965-84-9 613-167-00-5	reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1) Acute Tox. 3 H301 / Acute Tox. 2 H310 / Acute Tox. 2 H330 / Skin Corr. 1C H314 / Eye Dam. 1 H318 / Skin Sens. 1A H317 / Aquatic Acute 1 H400 (M = 100) / Aquatic Chronic 1 H410 (M = 100) / EUH071 Specific concentration limit (SCL): Skin Corr. 1C H314 \geq 0.6 / Skin Irrit. 2 H315 \geq 0.06 / Eye Dam. 1 H318 \geq 0.6 / Eye Irrit. 2 H319 \geq 0.06 / Skin Sens. 1A H317 \geq 0.0015 Acute toxicity estimate (ATE): ATE (dermal): 87 mg/kg bw / ATE (inhalation, vapour): 0.16 mg/L	0.6- 2.499999

Full text of classification: see section 16.

4. First aid measures

4.1. Description of first aid measures

General information

In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners. Consult a physician.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Seek medical advice immediately.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

Strong water jet

5.2. Special hazards arising from the substance or mixture

Do not breathe gas/fumes/vapour/spray.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device.

Additional information

Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

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7. Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Use only with sufficient ventilation. Refer to chapter 8: Exposure controls / Personal protection.

Further information

Respiratory protection necessary at: aerosol or mist formation.

7.2. Conditions for safe storage including any incompatibilities

Technical measures and storage conditions

Keep/Store only in original container.

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO).

Further information on storage conditions

Take care of instructions on label. Protect from heat and direct sunlight. Protect from frost.

7.3. Specific end use(s)

No measures required.

8. Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

Not applicable

8.2. Exposure controls

Personal protection equipment

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values. Use only respiratory protection equipment with CE-symbol including four digit test number. Combination filtering device Filter type: ABEK

Hand protection

Wear protective gloves. Recommended glove articles according EN ISO 374. Recommendation for protection against the commonly occurring ingredients in the products: For short-term contact (e.g. splash guard): Suitable material: Nitriles, Butyl caoutchouc (butyl rubber), material thickness: ≥ 0.4 mm, Penetration time of glove material depending on intensity and duration of exposure to skin: ≥ 480 min. The exact break through time can be found out by the manufacturer of the protective gloves and has to be observed. The protective gloves should always be checked for their suitability for specific workplaces (e.g. mechanical resistance, product compatibility). Follow the glove manufacturer's instructions and information on how to use, store, care for and replace gloves. The protective gloves should be replaced immediately if they are damaged or the first signs of wear and tear.

Eye/face protection

Wear eye glasses with side protection according to EN 166.

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Body protection

Suitable protective clothing: Protective clothing. Type 6 DIN EN 13034

Protective measures

Avoid contact with eyes and skin.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Aqueous solution
Colour	Yellow
Odour	Characteristic
Odour threshold	not applicable
Melting point/freezing point	not applicable
Initial boiling point and boiling range	100 °C
Flammability	not applicable
Explosion limit	
Lower explosion limit	Not determined
Upper explosion limit	Not determined
Flash point	>100 °C
Auto-ignition temperature	395 °C
Decomposition temperature	not applicable
pH at 20 °C	3.5 – 4.5 /1.0 weight-% PC-V-010
Viscosity at 20 °C	Liquid
Solubility	
Water solubility at 20 °C	999
Partition coefficient (n-octanol/water)	see section 12
Vapour pressure at 20 °C	not applicable
Density at 20 °C	1.025 g/cm ³
Relative vapour density	not applicable
Particle characteristics	not applicable

9.2. Other information

No further relevant information available.

10. Stability and reactivity

10.1. Reactivity

No information available.

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10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

Alkalis (lyes), reducing agents, strong oxidizing agents, nucleophiles

10.6. Hazardous decomposition products

None if stored and used properly.

In the event of a fire, hazardous decomposition products can arise, e.g. : Nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide, hydrogen chloride (HCl)

11. Toxicological information

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

Acute toxicity

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) oral, LD50, Rat
64 - 66 mg/kg

dermal, LD50, Rat

dermal, LD50, Rabbit: 87.12 mg/kg

inhalative (dust and mist), LC50, Rat: 0.169 mg/L (4 h)

Skin corrosion/irritation; Serious eye damage/eye irritation

Corrosive

Causes severe skin burns and eye damage.

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) Skin (4 h)

Skin (4 h)

Eyes

Respiratory or skin sensitisation

sensitising

May cause an allergic skin reaction.

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

STOT-single exposure; STOT-repeated exposure

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

Aspiration hazard

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

Practical experience/human evidence

Overall assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

11.2. Information on other hazards

Endocrine disrupting properties

No further information is available.

12. Ecological information

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

Do not allow to enter into surface water or drains.

12.1 Toxicity

Very toxic to aquatic organisms

reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 0.19 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 0.16 mg/L (48 h)

Algae toxicity, ErC50, Skeletonema costatum: 0.0052 mg/L (48 h)

*

Long-term Ecotoxicity

Very toxic to aquatic life with long lasting effects.

reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1) Algae toxicity,

NOEC: 0.0004 mg/L

Method: OECD 201

12.2 Persistence and degradability

Toxicological data is not available.

12.3 Bioaccumulative potential

Toxicological data is not available.

Bioconcentration factor (BCF)

Toxicological data is not available.

12.4. Mobility in soil

Toxicological data is not 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. Endocrine disrupting properties

No information available.

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12.7. Other adverse effects

No information available.

13. Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way.

List of proposed waste codes/waste designations in accordance with EWC

140603* other solvents and solvent mixtures

*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

14. Transport information

14.1. UN number or ID number

UN 3265

14.2. UN proper shipping name

Land transport (ADR/RID):

Corrosive liquid, acidic, organic, n.o.s.

(Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-Methyl-2H-isothiazol-3-one (3:1))

Sea transport (IMDG):

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

(Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-Methyl-2H-isothiazol-3-one (3:1))

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

Corrosive liquid, acidic, organic, n.o.s.

(Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-Methyl-2H-isothiazol-3-one (3:1))

14.3. Transport hazard class(es)

Class 8 corrosive substances

14.4. Packing group

III

14.5. Environmental hazards

Land transport (ADR/RID)

ENVIRONMENTALLY HAZARDOUS

Marine pollutant

p / Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-Methyl-2H-isothiazol-3-one (3:1)

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14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 – 8

Further information

Land transport (ADR/RID)

Tunnel restriction code E

Sea transport (IMDG)

EmS-No. F-A, S-B
in packages <= 5 litres not restricted 2.10.2.7

14.7. Maritime transport in bulk according to IMO instruments

No transport as bulk according IBC - code.

15. Regulatory information

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

EU legislation

Restrictions of occupation:

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Regulation (EU) No. 528/2012 on biocides

biocidal product

biocide, active substance

reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one 14.98 g/kg

and 2-methyl-2H-isothiazol-3- one (3:1)

Input 1-2.5 g/kg

Authorization number for biocidal products: PT 6

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC-value (in g/L): 0,0

National regulations

15.2. Chemical Safety Assessment

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

16. Other information *

Full text of classification in section 3:

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Acute Tox. 3 / H301	Acute toxicity (oral)	Toxic if swallowed.
Acute Tox. 2 / H310	Acute toxicity (dermal)	Fatal in contact with skin.
Acute Tox. 2 / H330	Acute toxicity (inhalative)	Fatal if inhaled.
Skin Corr. 1C / H314	Skin corrosion/irritation	Causes severe skin burns and eye damage.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Skin Sens. 1A / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic organisms.
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting effects.

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Met. Corr. 1	Corrosive to metals	On basis of test data.
Skin Corr. 1C	Skin corrosion/irritation	Calculation method.
Eye Dam. 1	Serious eye damage/eye irritation	Calculation method.
Skin Sens. 1	Respiratory or skin sensitisation	Calculation method.
Aquatic Acute 1	Hazardous to the aquatic environment	Calculation method.
Aquatic Chronic 1	Hazardous to the aquatic environment	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

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UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

* Data changed compared with the previous version