

OptiMan

Safety Data Sheet

Compliant with Regulation EC 1907/2006 (REACH)

Preparation date: 2020/08/07

Revision date: 2023/02/06. Version: 1.0

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

EvoMan

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

Identified uses:

EU fertilising product. Foliar fertiliser.

Uses advised against:

Not identified.

1.3. Details of the supplier of the safety data sheet

Bio-Focus sp. z o.o.

ul. Lipowa 7

62-303 Bierzginiek, Poland

ph. 726 200 146

e-mail: biuro@bio-focus.pl

1.4. Emergency telephone number: 112

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Labelling in accordance with Regulation (EC) No. 1272/2008 (CLP)

Eye Dam. 1 - Causes serious eye damage of category 1

H318 - Causes serious eye damage.

Aquatic Chronic 1; Causes chronic hazard to the aquatic environment of category 1

H411 - Extremely toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling in accordance with Regulation (EC) No. 1272/2008 (CLP)

Hazard pictograms:

H-phrases:

H301 - Toxic if swallowed.

H319 - Causes serious eye irritation.

H373 - May cause damage to organs through prolonged or repeated exposure

H411 - Toxic to aquatic life with long lasting effects.

P-phrases:

P314 - Get Medical advice/attention if you feel unwell.

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P391 - Collect the spillage.

P273 - Avoid release to the environment.

Contains: Manganese sulphate monohydrate.

2.3. Other hazards

No additional data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Hazardous ingredients:

Name	Product identifier	% [m/m]	Classification in accordance with Regulation (EC) No. 1278/2008 [CLP]	Specific concentration limits
Manganese sulphate monohydrate	CAS: 10034-96-5 EC: 232-089-9 Index: 025-003-00-4 REACH: 01-2119456624-35-XXXX	30-40	STOT RE 2 (*) Aquatic Chronic 2	-

The remaining ingredients are not classified as hazardous or they do not satisfy the content in mixture criteria. The full meaning of symbols and phrases is provided in Section 16.

The full texts of H-phrases is provided in Section 16.

4. FIRST AID MEASURES

4.1. Description of first aid measures

FIRST AID IN GENERAL:

Check vital functions.
Unconscious: ensure proper airways and breathing.
Respiratory arrest: artificial respiration or oxygen.
Circulatory arrest: conduct resuscitation.
Conscious victim with labored breathing: semi-sitting position.
Provide psychological support.

EXPOSURE BY INHALATION:

Move victim to fresh air, protect against heat loss. If labored breathing occurs, use respiratory assistance and call a doctor immediately.

EXPOSURE BY SKIN:

Remove contaminated clothing. If on skin, wash immediately and thoroughly with plenty of water and soap.

EXPOSURE BY EYE:

If in eyes: Immediately after the removal of contact lenses (if present), rinse carefully with water for 15 minutes. Get medical advice.

EXPOSURE BY SWALLOWING:

If swallowed, do not give victim plenty of water to drink. Do not induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

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

Most important symptoms and effects are described in Section 2.2 (label elements) and/or in Section 11.

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

Indications for first aiders: no antidote available. Use symptomatic treatment.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Advised extinguishing media

Sprayed water (diffused), extinguishing powder, proper foam

Extinguishing media advised against

Water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products: carbon oxides, sulphur oxides, manganese oxides.

5.3. Advice for firefighters

Always use protective clothing and breathing apparatus enabling breathing regardless of contaminated atmosphere. Do not stay within the hazardous zone without proper protective clothing and equipment. If water is used, avoid effluent discharge to the sewage system or aquatic environment by embanking the area and sewer wells.

6. ACCIDENTAL RELEASE MEASURE

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-rescuing personnel.

Avoid eye and skin contact with the preparation. Before removing the released product, ensure effective ventilation and wear personal protective equipment, which is referred to in Section 8 of this SDS.

6.1.2. For rescuing personnel.

Personnel participating in the failure removal must be equipped with protective clothing, gloves and full face masks, referred to in Section 8, of a protection class suitable for a given hazard.

6.2. Environmental precautions

Prevent further leakage or spillage, if safe. Prevent entering the sewage system.

6.3. Methods and materials for containment and cleaning up

6.3.1. Advised leakage containment.

Embank the leakage site. Protect drain/sewer wells.

6.3.2. Advice on leakage removal.

Remove the release cause.

6.3.3. Other information on leakage or release.

Not specified.

6.4. Reference to other sections

The collected mixture with sorbent must be disposed of as hazardous waste in accordance with the information referred to under Section 13. Limit parameters for the work area control are provided in Section 8.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Advice.

Prevent spreading in the environment and entering the sewage system and watercourses.

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7.1.2. Advice on general occupational hygiene.

Adhere to personal hygiene rules, use protective clothing and equipment. Do not eat and drink in work areas, avoid direct eye, skin and mouth contact with the preparation. Remove all the contaminated clothing and wash hands in water with soap after finished or interrupted work.

7.2. Conditions for safe storage, including any incompatibilities Preparation must be kept in sealed, original packaging, in dry and airy storage rooms away from heat sources, open flame and flammable materials.

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7.3. Specific end use(s) Fertiliser.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. The values provided below are based on the Regulation of the Minister of Labour and Social Policy on the maximum permissible concentrations and intensity of agents harmful to health in working environment (Journal of Laws of 2018, item 1286 and Journal of Laws of 2021, item 325, as amended):

- Manganese sulphate monohydrate (CAS: 10034-96-5); NDS - 0.2 mg/m³ [Manganese and its inorganic compounds - in conversion to MN inhalable and respirable fraction); NDSCh - not determined

8.2. Exposure controls

8.2.1. Advised technical controls

Use in accordance with occupational health and safety rules. Wash hands before meals and after finishing work.

8.2.2. Individual protection measures such as personal protective equipment

a) Eye or face protection

Wear protective glasses in accordance with EN166. Glasses may be replaced with a full face mask.

b) Skin protection

Wear disposable protective gloves, sealed, with five fingers, made from neoprene or other material ensuring chemical resistance, preferably in accordance with EN 374 standard. In case of preparation contact, wash hands in water with soap. It is recommended to use impenetrable protective clothing, apron, overalls, preferably in accordance with EN 130 standard.

c) Airways protection

Not specified. For particularly sensitive persons, use masks made in accordance with EN140 or EN136 standard.

d) Thermal hazards Not identified.

8.2.3. Environment exposure controls

Handling consistent with the product label content ensures satisfying the requirements arising from the community legislation referring to the environment protection. Prevent spreading in the environment and entering the sewage system and watercourses.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

- | | | |
|---|----------------|-------------------|
| a) Appearance | Liquid | |
| b) Colour | brown shades | |
| c) Odour | characteristic | odour |
| d) Melting/freezing point | No data | available |
| e) Boiling point or initial boiling point and boiling range | | |
| - No data available | | |
| f) Material flammability | No data | available |
| g) Lower and upper explosive limits | . | No data available |

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h) Flash point	No data available
i) Auto-ignition temperature	No data available
j) Decomposition temperature	No data available
k) pH	5.0-7.0
l) Kinematic viscosity	No data available
m) Solubility	No data available
n) Partition coefficient n-octanol/water (log coefficient value)	No data available
o) Vapour pressure	No data available
p) Density or relative density	No data available
q) Relative vapour density	No data available
r) Molecule characteristic	No data available

9.2. Other Information

Not specified.

10. STABILITY AND REACTIVITY

10.1. Reactivity

Not known.

10.2. Chemical stability

Product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Not known.

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

Metals, acid, dusts, metal dusts, strong oxidisers, inorganic peroxides.

10.6. Hazardous decomposition products

In case of fire, zinc and sulphur oxides may be released.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

a) Acute toxicity

The calculation method does not indicate any activity within the acute toxicity category.

b) Skin corrosion/irritation

The calculation method does not indicate any activity within the acute toxicity category.

c) Serious eye damage/irritation

Causes serious eye damage.

d) Respiratory or skin sensitisation

The calculation method does not indicate any skin sensitisation activity.

e) Germ cell mutagenicity

The calculation method does not indicate any germ cell mutagenicity.

The calculation method does not indicate any carcinogenicity.

g) Reproductive toxicity

The calculation method does not indicate any reproductive toxicity.

h) Specific target organ toxicity - single exposure

The calculation method does not indicate any specific target organ toxicity

i) Specific target organ toxicity - repeated exposure

The calculation method does not indicate any specific target organ toxicity j) Aspiration hazard

The calculation method does not indicate any aspiration hazard.

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11.2. Information on other hazards.

No additional information available.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

H411 - Toxic to aquatic life with long lasting effects

Manganese sulphate monohydrate:

Fish: LC50:49.9 mg Mn/1/96 h (salmo trutta)

NOEC: 4.5mg Mn/1/35 d (read-across from MnCl₂ to MnSO₄)

Aquatic LC50: 3.0 mg Mn/1/96 h

invertebrates: ErC50: 61.0 mg

Algae/aquatic plants: EC50: >1000mg/l

NOEC: 560mg/l

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Mixture does not satisfy PBT or vPvB criteria.

12.6. Endocrine-disrupting properties.

No data available.

12.7. Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Do not remove to the sewage system. Prevent contaminating surface waters and underground waters. Do not mix with municipal waste and do not keep in municipal waste disposal sites. Dilute liquid residues with water and spray onto the pre-sprayed surface. Spray the apparatus washing waste water onto the pre-sprayed surface, using the same individual protection measures. Hand over to an authorised undertaking holding a licence for this waste type management. Hand over to an authorised undertaking holding a licence for this waste type management.

Contaminated packaging handling:

Deliver the waste packaging to undertakings authorised for its processing.

Empty the packaging completely. Do not introduce to the sewage system, surface waters and waste water.

14. TRANSPORT INFORMATION

14.1. UN number or ID number: not applicable

14.2. UN proper shipping name: not applicable

14.3. Transport hazard class(es): not applicable

14.4. Packing group: not applicable

14.5. Environmental hazards: product hazardous to the environment

14.6. Special precautions for user: none

14.7. Maritime transport in bulk according to the IMO instruments: not subject

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15. REGULATORY INFORMATION

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

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the registration, assessment, granting permits and applied limitations within chemicals (REACH), as amended

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (EU) 2019/1009 of 5 June 2019 laying down rules concerning making EU fertilising products available on the market and amending Regulations (EC) No. 1069/2019 and (EC) No. 1107/2009 and repealing Regulation (EC) No. 2003/2003, as amended

COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the registration, assessment, granting permits and applied limitations within chemicals (REACH), as amended

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 on the registration, assessment, granting permits and applied limitations within chemicals (REACH) and the establishment of the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94, as well as Council Directive 76/769/EEC and Commission Directive 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended

Regulation of the European Parliament and of the Council (EC) No. 1272/2008 of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No. 1907/2006, as amended

15.2. Chemical safety assessment

The supplier has not conducted the mixture chemical safety assessment.

16. OTHER INFORMATION

The data contained in this SDS apply only to the specified product and reflect our current knowledge and experience, and they may be non-exhaustive. The user is held responsible for usage within the meaning of the valid regulations.

The explanation of abbreviations and acronyms which may be used in the SDS:

CLP Classification - pursuant to REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (EC) No. 1272/2008 **m/m** - mass-mass

EC Number - i.e. EINECS, ELINCS or NLP, is an official number of a given substance in the European Union

CAS No. - numerical designation assigned to a chemical substance by the American organisation, Chemical Abstracts Service

PBT - designation of persistent substances, demonstrating bioaccumulative potential and toxic **vPvB** - designation of extremely persistent substances, demonstrating extreme bioaccumulative potential **LD₅₀** - substance dose, lethal to 50% of a tested population.

LC₅₀ - substance dose, lethal to 50% of a tested population.

DT_{50/90} - partial decomposition period/ after 90 days **b.m.** - body mass

d.m - dry mass

References to key literature and data sources

None.

Information assessment methods used for classification purposes

Calculation methods.

List of proper phrases referred to in Section 2-15 and (if appropriate) full text of all the phrases which are not provided in whole in Section 2-15

Skin Corr. 1, Corrosion of category 1

Eye Dam. 1; Causes serious eye damage, hazard category 1

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Aquatic Acute 1; Causes acute hazard to aquatic environment of category 1

Aquatic Chronic 1; Causes chronic hazard to the aquatic environment of category 1

Acute Tox. 4, Acute toxicity

H301 - Toxic if swallowed.

H319 - Causes serious eye irritation.

H373 - May cause damage to organs through prolonged or repeated exposure

H411 - Toxic to aquatic life with long lasting effects.

P314 - Get Medical advice/attention if you feel unwell.

P391 - Collect the spillage.

P273 - Avoid release to the environment.

Recommendations concerning all the indicated employee training courses for guaranteeing the protection of human life and the environment.

Mandatory training courses arising from the Labour Code regulations.

THE END OF THE DOCUMENT