

Material safety data sheet
According to (EG) No. 1907/2006 (REACH)
Trade name: GHF ENHANCER

Printing date 30/03/2017

Reviewed on 04/01/2016

1. IDENTIFICATION OF SUBSTANCE

Trade name: GREEN HOUSE FEEDING BIO ENHANCER

Manufacturer/Supplier:

GHSC TRADING BV

Keienbergweg 51

1101 GA Amsterdam, The Netherlands

shop@greenhousefeeding.com

www.greenhousefeeding.com

Tel: +31 20 7163834

Information:

Section 16 (Contact)

2. IDENTIFICATION OF HAZARD

Classification according to (EG) No. 1272/2008, annex VII, regulation 67/548/EWG or regulation 1999/45/EG: The substance is not classified as dangerous to health and environment. It can cause eye, skin or respiratory tract irritation at sensitive persons.

3. COMPOSITION/ INFORMATION ABOUT COMPONENTS

Substance: This product is a physical blend of potassium humate, seaweed extract, Bacillus Amyloliquefaciens and Trichoderma hazianum

Mixtures Potassium salts of Humic acids
CAS-No.: 68514-28-3; EINECS-No.: 271-030-1
Dried seaweed extract (Ascophyllum nodosum)
CAS-No. 84775-78-0, EINECS-No. 283-907-6

4. FIRST AID MEASURES

General information:

In case irritation or health complaints consult a doctor and provide the information of this MSDS.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

After skin contact:

Instantly wash with water and soap and rinse thoroughly. If symptoms persist, consult doctor.

After inhalation:

Provide fresh air. If symptoms persist, consult doctor.

After swallowing:

Rinse out mouth and then drink plenty of water. In case of persistent symptoms consult doctor.

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5. FIRE FIGHTING MEASURES

Suitable extinguishing agents:

Water, foam, extinguishing powder, CO₂

Inproper extinguishing agents:

None

Special hazards caused by the material, its products of combustion or resulting gases:

Can be released in case of fire: CO, CO₂

General information for fire-fighters:

The product is not flammable. Combustion residues and contaminated fire water are to be disposed according to local regulations. Avoid skin contact by wearing protective clothing and keeping a safety distance.

Contaminated extinguisher water should not be collected separately and should not go to the canalization.

6. ACCIDENTIAL RELEASE MEASURES

Person-related safety precautions, protective equipment and measurements in case of emergency:

Protective gloves and safety glasses to avoid skin and eye contact.

Avoid dust development.

Ensure sufficient aeration and sufficient inhalation protection.

Measures for environmental protection:

Avoid entering of drainage system, surface or groundwater with concentrated product.

Measures for collecting and cleaning:

Isolate product and collect it in suited containers. Dilute residues and dispose them via drainage system.

Reference to section:

Please note safety measures under section 7 and 8.

7. HANDLING AND STORAGE

Measures for safe handling:

Do not leave containers open.

Avoid dust development. In situations of dust development ensure sufficient aeration.

Observe minimum standards according to TRGS 5001. To these belong common hygiene measures like

- not to eat, drink and smoke in working areas
- to wash hands after handling of the product
- to take off contaminated clothing and protective equipment before entering break rooms.

References to measures regarding fire and explosion control:

No special measures required.

Storage conditions:

Store in cool, dry conditions in well sealed containers in suited store rooms.

Requirements to be met by storerooms and containers:

Do not store together with feeding or food stuffs.

Material safety data sheet
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Printing date 30/03/2017

Reviewed on 04/01/2016

Storage class:
13

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Parameters to be monitored:

When handling with chemicals the usual protective measures should be considered.

Breathing protection:

Not required if room is well-ventilated. Wear respirator in case of dust formation.

Eye protection:

Safety glasses

Hand protection:

Safety gloves

Body protection:

Safety working clothes

9. PHYSICAL AND CHEMICAL PROPERTIES

General information:

Aggregate state:

Solid, water soluble granules

Colour:

Black brown

Odour:

Imperceptible

pH value:

9-10 (10% water solution)

Boiling point / range:

Not determinable

Melting-/freezing point:

Not determinable

Flash point:

Non applicable

Relative auto-ignition temperature:

Not determinable

Explosive features:

Not explosive

Water solubility:

Soluble in water (> 200 g/L)

Bulk density:

0.6-0.65 g/cm³

10. STABILITY AND REACTIVITY

Reactivity:

Slight reactivity

Chemical stability:

The product is stable under normal usage and storage conditions.

Dangerous reactions:

No dangerous reactions to be expected if used according to specifications.

Conditions to be avoided:

Contact with strong oxidants

Incompatible materials:

Strong oxidants

Dangerous products of decomposition:

CO, CO₂ in case of fire

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11. TOXICOLOGICAL INFORMATION

The product can cause eye, skin or respiratory tract irritation at sensitive persons.

Acute toxicity:

Acute oral toxicity (acc. EU B.1):	LD ₅₀ > 2000 mg/kg (rat)
Acute dermal toxicity (acc. EU B.3):	LD ₅₀ > 2000 mg/kg (rat)
Skin irritation (acc. EU B.4):	No irritabile effect on skin (rabbit)
Eye irritation (acc. EU B.5):	No irritabile effect on eyes (rabbit)
Sensitization (acc. EU B.42):	Can have sensitizing effects
Toxicity after repeated doses: (acc. EU B.7):	28 day oral test (rat): NOAEL (No observed adverse effect level) 500 mg/kg/day
Carcinogenity:	No data available
Mutagenity (acc. EU B.12/13/14; OECD 473):	in vitro: ames test negative Chromosomal aberration test negative in vivo: micronucleus test negative
Reproduction toxicity:	No data available
Further references:	None

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Acute toxicity for fish (*Poecilia reticulata*) acc. EU C.1

24 hours – LC ₅₀ > 128 mg/L	24 hours – NOEC = 128 mg/L
48 hours – LC ₅₀ > 128 mg/L	48 hours – NOEC = 128 mg/L
72 hours – LC ₅₀ > 128 mg/L	72 hours – NOEC = 128 mg/L
96 hours – LC ₅₀ > 128 mg/L	96 hours – NOEC = 128 mg/L

Acute toxicity for dafnie (*Daphnia magna*) acc. EU C.2

24 hours – LC ₅₀ > 116 mg/L	24 hours – NOEC = 116 mg/L
48 hours – LC ₅₀ > 116 mg/L	48 hours – NOEC = 116 mg/L

Alga growth inhibition:

No data available

Act. sludge respiration inhibition (acc. EU C.11): EC₅₀ > 1000 mg/L

Persistence and decomposition (acc. EU C.4-E and EU C.7):

The substance is not easily degradable biologically. 2% decomposition within 28 days. Abiotic decomposition - Hydrolysis as a pH function: under pH 4.7 and 9 (25°C) is the decomposition half time longer than 1 year.

Bio-accumulating potential (acc. EU A.8):

Coefficient of distribution: log P_{ow} = -2.16 ± 0.45 (pH=9.1; 23°C); Bio-concentrating factor (BCF): No data available.

Mobility in the soil:

High amounts of the product can pollute ground and surface water. Therefore it is necessary to take care of accurate handling to avoid the leakage of the concentrated product into ground and surface water.

PBT and vPvB assessment results: No data available

Other adverse effects: No data available

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13. DISPOSAL CONSIDERATIONS

Waste treatment:

No dangerous waste. Avoid dust formation. Product has to be disposed according to official local regulations. Agree exact waste code with waste disposal contractor.

Waste code:

No data available

Packaging:

Dispose polluted and cleaned packaging to official local regulations.

14. TRANSPORT INFORMATION

UN number:

No dangerous good

Methodical UN transport labelling:

ADR/RID / IMDG-Code / ICAO-TI / IATA-DGR: No dangerous good

Transport dangerous Goods classes:

No data available

Packaging group:

No data available

Environmental perils:

ADR/RID / IMDG-Code/ICAO-TI/IATA-DGR: no

Special notes for users:

See sections 6-8

15. REGULATORY INFORMATION

Regulations for safety, sanitary and environmental protection/specific laws for the substance or the mixture:

EU directives:

Directive (EG) No. 2037/2000, directive (EG) No. 850/2004, directive (EG) No. 689/2008 and directive (EG) No. 648/2004: Not applicable

Limitations according to section VIII of the directive (EG) 1907/2006: None

National directives:

water hazard class:

WGK0: In general not hazardous to waters (self-rating).

Substance safety assessment:

The substance has not been safety assessed.

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16. OTHER INFORMATION

Bibliographical references and data origins:

Directives:

Preparations directive (1999/45/EG) as last amended by Commission Directive (EG) No. 1907/2006. Substance Directive (67/548/EWG), as last amended by Commission Directive 2009/2/EG. REACH Directive (EG) No. 1907/2006, as last amended by Commission Directive (EU) Nr. 453/2010. Directive (EG) No. 1272/2008, as last amended by Commission Directive (EG) No. 790/2009.

Internet:

<http://www.baua.de>

Hazard notes referred to in section 2 and 3:

According to Directive (EG) No. 1272/2008:

None

According to Directive 67/548/EWG:

Based on available data the product is not a dangerous preparation as defined by the Chemicals Act and the Hazard Substance Directive. No specific labelling requirements according to the Hazard Substance Directive.

Methods according to item 9 of Directive (EG) No. 1272/2008 for the assessment of information for the purpose of classification:

None

This data is based on our present knowledge. It can neither be regarded as a product quality guarantee nor as a basis of a contractual legal relationship.

Data sheet issuing sector:

Product safety department

Contact:

PF Trading BV

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