



SAFETY DATA SHEET

Empathy Bio-Active Compost Improver for Grow Bags

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name Empathy Bio-Active Compost Improver for Grow Bags

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

Identified uses Plant feed.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier

PlantWorks Ltd.
Unit 930
Cornforth Drive
Kent Science Park
Sittingbourne
Kent
ME9 8PX

1.4. Emergency telephone number

Emergency telephone +44 (0)1795 411527 (Mon-Fri 9am-5pm), +44 (0) 7930550731– Out of normal hours only.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to
Regulation EC no.1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

Pictogram Not Required

Precautionary statements

P102 Keep out of reach of children.

P264 Wash contaminated skin thoroughly after handling.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/ attention.

P501 Dispose of contents/ container in accordance with national regulations.

P261: Do not breathe dust

Supplementary precautionary statements P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

The bacteria and fungi in this mixture are considered to belong to hazard group 1 as defined by the Advisory Committee on Dangerous Pathogens (ACDP) as "a biological agent unlikely to cause human disease". It should NOT be assumed.

However, that these organisms will be innocuous in all situations or that infections can never occur. The mixture should therefore not be used by, or in the presence of immunocompromised persons. This product does not meet the criteria for classification as hazardous as defined in the Regulation EC 1272/2008 and in Directive 67/548/EEC.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Containing non GMO produced plant beneficial fungi and plant growth promoting rhizobacteria.

Hazardous components: None

| | | | |
|--|-------------------------|---|------|
| Green waste | CAS number: N/A | EC number: N/A | 80 % |
| Substance with National workplace exposure limits. | | | |
| Classification: | | Not classified | |
| Perlite | CAS number: 130885-09-5 | EC number: 603-442-8 | <1% |
| Substance with National workplace exposure limits | | | |
| Classification: | | Not classified | |
| Onyx granular | CAS number: | EC number: N/A | 10% |
| Substance with National workplace exposure limits | | | |
| Classification: | | Not classified | |
| Bacteria and mycorrhizal fungi | CAS number: N/A | EC number: N/A | 10% |
| Substance with National workplace exposure limits | | | |
| Classification: | | Microbiologically categorised as Hazard Group 1 | |

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

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| General information medical: | Get medical attention if any discomfort continues. Show this Safety Data Sheet to the personnel. |
| Inhalation: | Remove person to fresh air and keep comfortable for breathing. Call a poison centre or a doctor if you feel unwell |
| Ingestion: | Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel. |
| Skin contact: | Rinse with plenty of water. In case of a skin reaction, consult a physician. |
| Eye contact: | Rinse with water for several minutes. Do not rub eye. Remove any contact lenses, if present |

and easy to do. Continue rinsing. Get medical attention if any discomfort continues.

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

| | |
|---------------------|--|
| General information | Low toxicity, unlikely to cause a problem. |
| Inhalation | No specific symptoms known. |
| Ingestion | No specific symptoms known. |
| Skin contact | Prolonged contact may cause dryness of the skin. |
| Eye contact | Irritating to eyes. |

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not classified as flammable. Extinguish with foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture

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| Specific hazards | None known. |
| Hazardous combustion products | Fire will produce hazardous products of combustion. Exposure to decomposition products may be a hazard to health. |

5.3. Advice for firefighters

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| Protective actions during firefighting | Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities. |
| Special protective equipment | Self-contained breathing apparatus and full protective body clothing must be worn in case of fire. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes. In case of high airborne dust levels wear a dust mask (FFP2). Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Control the release at its source. Contain spills to prevent it from spreading, contaminating soil or entering sewage and drainage systems or any body of water.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Contain and sweep up spillages. Place unusable material in clearly labelled containers of plastic bags for disposal. Wet residues are slippery, wash floor remove all traces.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For

waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep out of reach of children. Prevent dust formation and inhalation. Avoid contact with eyes and skin. Keep away from food and drink. Avoid inhalation of dust. Wear protective clothing as described in Section 8 of this safety data sheet. Keep pack tightly sealed when not in use and store in a dry, cool place.

Advice on general occupational hygiene Wash skin thoroughly after handling. Take off contaminated clothing. Wash contaminated clothing before reuse.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

N/A

8.2. Exposure controls

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|---|--|
| Appropriate engineering controls | Provide adequate ventilation Avoid inhalation of dust |
| Eye/face protection Large Spillages: | Avoid contact with eyes. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible and wear suitable eye protection (EN 166). |
| Hand protection | Wear suitable gloves when handling the product over long periods or if a risk assessment indicates this is necessary. Gloves complying with EN420 |
| Hygiene measures | Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. |
| Respiratory protection | Use suitable dust respirator if dust concentration is high (Filter P2). |
| Environmental exposure controls | Keep container tightly sealed when not in use. |

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

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|--|---|
| Appearance | Solid |
| Colour | Brown with white granules |
| Odour | Medium/Strong |
| Odour threshold | Not available. |
| pH | Not available. |
| Melting point | Not available. |
| Initial boiling point and range | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Upper/lower flammability or explosive limits | Not available. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | 0.8g/ml |
| Solubility(ies) | Not known. |
| Partition coefficient | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition Temperature | Not available. |
| Viscosity | Not applicable. |
| Explosive properties | Not considered to be explosive. |
| Oxidising properties | Does not meet the criteria for classification as oxidising. |

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under normal conditions of storage, handling and use.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions
Keep away from heat

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid Alkalis, strong oxidising agents, chlorates, nitrates and nitrites.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours, sulphur oxides and ammonia.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Not expected to be toxic, however if large quantities are ingested, seek medical advice.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

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

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not relevant. Solid.

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation High concentrations of dust may be irritant to the respiratory tract.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged contact may cause dryness of the skin.

Eye contact Irritating to eyes.

Route of entry Ingestion Inhalation Skin and/or eye contact

Target organs No specific target organs known.

SECTION 12: Ecological Information

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility of frequent spills can have harmful or damaging effect on the environment.

Ecotoxicity

12.1. Toxicity

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

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6. Other adverse effects

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| Other adverse effects | None known. |
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SECTION 13: Disposal considerations13.1. Waste treatment methods

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| General information | The waste is considered to be non hazardous. The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. |
| Disposal methods | Packaging: Reuse or recycle products wherever possible. |

SECTION 14: Transport information

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| General | The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID). |
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14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not required

14.4. Packing group

Not applicable.

14.5. Environmentally hazardous substance/marine pollutant

Not applicable.

14.6. Special precautions for user

Not applicable.

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

Not applicable.

SECTION 15: Regulatory information15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

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| National regulations Health and Safety at Work etc. | Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits. |
|---|--|

EU legislation

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| 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) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. 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 (as amended). |
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15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms ADR: European Agreement concerning the International Carriage of Dangerous Goods by used in the safety data sheet Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.

IATA: International Air Transport Association.

ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate.

PBT: Persistent, Bioaccumulative and Toxic substance.

vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations None

Training advice Read and follow manufacturer's recommendations.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.