



SAFETY DATA SHEET

# OptiYield Consortium Plus

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

### 1.1. Product identifier

Trade name:

OptiYield Consortium Plus

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

Relevant identified uses of the substance or mixture:

soil conditioner  
Restricted to professional users.

Use descriptors (UK REACH):

Sectors of use	Description
SU 1	Agriculture, forestry, fishery

Uses advised against :

None known.

### 1.3. Details of the supplier of the safety data sheet

Manufacture company and address:

#### Microferm Ltd.

Microferm House Spring  
Lane North WR14 1BU  
Malvern United Kingdom  
+44 1684 577171  
[www.bio-systemseurope.co.uk](http://www.bio-systemseurope.co.uk)

Contact person:

Bio-Systems Europe Technical Department

E-mail:

[sds@bio-systemseurope.co.uk](mailto:sds@bio-systemseurope.co.uk)

Supplier Company identification

#### Emerald Research Ltd

Address of Supplier

Unit 2, Tech Box Hub  
The AgriTech Centre, Hartpury University GL19 3BE  
Gloucestershire United Kingdom  
+44 1242 506206  
<https://www.emeraldresearchltd.com>

Contact person:

Emerald Research Ltd Technical Department

E-mail:

[info@emeraldresearchltd.com](mailto:info@emeraldresearchltd.com)

Revision:

11/04/2024

SDS Version:

1.0

### 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

### 2.2. Label elements

Hazard pictogram(s):

Not applicable.

Signal word:

Not applicable.

Hazard statement(s):

Not applicable.

Precautionary statement(s):

General:

Additional labelling:

Not applicable.

<i>Prevention:</i>	-
<i>Response:</i>	-
<i>Storage:</i>	-
<i>Disposal:</i>	-
<i>Hazardous substances:</i>	None known.
<i>Additional labelling:</i>	Not applicable.

### 2.3. Other hazards

The preparation contains microorganisms belonging to hazard group 1 as defined by the Advisory Committee on Dangerous Pathogens (ACDP) as unlikely to cause human disease. However it should not be assumed that infection can never occur. People who are immunocompromised should not work with this product.

<i>Additional warnings:</i>	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) 2018/605.
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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

Not applicable. This product is a mixture.

### 3.2. Mixtures

Does not contain any substances required to report

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

### Other information

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## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<i>General information:</i>	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.
<i>Inhalation:</i>	In case of discomfort: bring the person into fresh air.
<i>Skin contact:</i>	Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.
<i>Eye contact:</i>	If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) and continue until irritation stops. Remove contact lenses.
<i>Ingestion:</i>	Rinse and flush mouth thoroughly and consume large quantities of water. In case of continued discomfort: seek medical assistance and bring this safety data sheet.
<i>Burns:</i>	Not applicable.

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

High amounts of dust can cause coughing and general irritation of the respiratory airways.

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

Treat symptomatically.

### Information to medics

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

## SECTION 5: FIREFIGHTING MEASURES



- 5.1. **E** ia: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.
- x**
- 5.2. Special hazards arising from the substance or mixture**  
**t** 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.
- i**
- 5.3. Advice for firefighters**  
**n** Fire fighters should wear appropriate personal protective equipment.  
**g**  
**u**

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

- i**
- s** **6.1. Personal precautions, protective equipment and emergency procedures**  
 Contaminated areas may be slippery.
- h**
- i** **6.2. Environmental precautions**  
 Avoid discharge to lakes, streams, sewers, etc. Keep unauthorized persons away from the spill
- n**
- g** **6.3. Methods and material for containment and cleaning up**  
 Collect spills carefully. Moist the material with water in order to prevent the formation and propagation of dust. Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.
- m**
- e** **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.
- d**
- i**

**SECTION 7: HANDLING AND STORAGE**

- a**
- S** **7.1. Precautions for safe handling**  
 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.
- u**
- i**
- t**
- a** **7.2. Conditions for safe storage, including any incompatibilities**
- b** *Recommended storage material:* Keep only in original packaging.
- l**
- e** *Storage temperature:* Dry, cool and well ventilated
- e** *Incompatible materials:* Acids Bases
- x**
- t**
- i** **7.3. Specific end use(s)**  
 This product should only be used for applications quoted in section 1.2.
- n**
- g**
- u**

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

- i**
- s**
- h** **8.1. Control parameters**  
 No substances are listed in the national list of substances with an occupational exposure limit.
- i** **DNEL** No data available.
- n**
- g**
- m** **NEC** No data available.
- e**
- d**
- 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:* Apply standard precautions during use of the product.



Avoid inhalation of gas or dust.

Airborne gas and dust concentrations must be kept at a minimum. Provide efficient mechanical ventilation. If not possible use suitable respiratory equipment.

*Hygiene measures:*

Wash hands after use.

*Measures to avoid environmental exposure:*

No specific requirements.

**Individual protection measures, such as personal protective equipment**


*Generally:*

Use only UKCA 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:*

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0,2	> 480	EN374-2, EN374-3, EN388	

*Eye protection:*

Type	Standards	
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>	Powder
<i>Colour:</i>	Brown
<i>Odour / Odour threshold:</i>	Mild
<i>pH:</i>	-
<i>pH in solution:</i>	3.5-5.5 (%)
<i>Density (g/cm<sup>3</sup>):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Kinematic viscosity:</i>	Does not apply to solids.
<i>Particle characteristics:</i>	Testing not relevant or not possible due to the nature of the product.

**Phase changes**

<i>Melting point/Freezing point (°C):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Softening point/range (waxes and pastes) (°C):</i>	Does not apply to solids.
<i>Boiling point (°C):</i>	Does not apply to solids.
<i>Vapour pressure:</i>	Testing not relevant or not possible due to the nature of the product.
<i>Relative vapour density:</i>	Does not apply to solids.
<i>Decomposition temperature (°C):</i>	Testing not relevant or not possible due to the nature of the product.

**Data on fire and explosion hazards**

<i>Flash point (°C):</i>	Does not apply to solids.
<i>Flammability (°C):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Auto-ignition temperature (°C):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Lower and upper explosion limit (% v/v):</i>	Does not apply to solids.

**Solubility**

<i>Solubility in water:</i>	Testing not relevant or not possible due to the nature of the product.
<i>n-octanol/water coefficient (LogKow):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Solubility in fat (g/L):</i>	Testing not relevant or not possible due to the nature of the product.

**9.2. Other information**

<i>Oxidizing properties:</i>	Testing not relevant or not possible due to the nature of the product.
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**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**

Extremes of temperature

**10.5. Incompatible materials**

Acids  
Bases

**10.6. Hazardous decomposition products**

The product is not degraded when used as specified in section 1.

<i>Other physical and chemical parameters:</i>	No data available.
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## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

#### Acute toxicity

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

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

#### 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

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

#### Reproductive toxicity

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

#### 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

None known.

#### Endocrine disrupting properties

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

#### Other information

None known.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

No data available.

### 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**

None known.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

Product is not covered by regulations on dangerous waste.  
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

**EWC code**

Not applicable.

**Specific labelling**

**Contaminated packing**

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

**SECTION 14: TRANSPORT INFORMATION**

	<b>14.1 UN / ID</b>	<b>14.2 UN proper shipping name</b>	<b>14.3 Hazard class(es)</b>	<b>14.4 PG*</b>	<b>14.5 Env**</b>	<b>Other information:</b>
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**

<i>Restrictions for application:</i>	Restricted to professional users.
<i>Demands for specific education:</i>	No specific requirements.
<i>SEVESO - Categories / dangerous substances:</i>	Not applicable.
<i>Additional information:</i>	Not applicable.
<i>Sources:</i>	Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law

**15.2. Chemical safety assessment**

No

**SECTION 16: OTHER INFORMATION****The full text of identified uses as mentioned in section 1**

SU 1 = Agriculture, forestry, fishery

**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  
CatalogueGHS = Globally Harmonized System of Classification and Labelling of Chemicals 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**In accordance with UK-REACH, a safety data sheet is not required for this product. This safety data sheet has been created on  
a voluntary basis to distribute relevant information as required by UK-REACH.**The safety data sheet is validated by**

Simon Fox MD Emerald Research Ltd

**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: GB-en