

SAFETY DATA SHEET

This SDS complies with REACH 1907/2006 and 2001/58/EC, GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

PRODUCT NAME: **PhycoTerra® FX**
FORMULA: Preparation/Mixture
PRODUCT USE: For use as a foliar treatment

MANUFACTURER'S NAME:
Heliae Development, LLC
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Section 2: Hazards Identification

GHS HAZARD CLASS Not Applicable. This product does not meet the physical, health, or environmental classification criteria of GHS (Globally Harmonized System).

Hazards not otherwise classified (HNOC) - None

HAZARD CLASSIFICATION: Not classified as hazardous based on IATA, IMDG, and DOT.

FIRE AND EXPLOSION: Not considered flammable or combustible.

POTENTIAL HEALTH EFFECTS: <0 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE: Dark green liquid

Estimated NFPA Rating:

Component	Health (Blue)	Flammability (Red)	Reactivity (Yellow)	Special (White)
PhycoTerra® FX	0	0	0	-----

Section 3: Composition, Information on Ingredients

PRODUCT COMPOSITION	APPROX % (by WT)	CAS NO.	EC NUMBER	CANADA DSL
Water	Balance	7732-18-5	231-791-2	Y
Organic Matter	9	--	--	N
Phosphoric Acid	1.5	7664-38-2	231-633-2	Y
Potassium Sorbate	0.1-1.0	24634-61-5	246-376-1	Y
Sodium Benzoate	0.1-1.0	532-32-1	208-534-8	Y

Section 4: First Aid Measures

Description of First Aid Measures

Inhalation	If inhaled, supply fresh air or oxygen. Adverse effects are not expected from this product.
Skin Contact	Wash skin with soap and water. Adverse effects not expected from this product.
Eye Contact	Flush eyes with water for at least 15 minutes. Get immediate medical attention.
Ingestion	If swallowed, do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms/Injuries after Inhalation	May cause respiratory tract irritation.
Symptoms/Injuries after Skin Contact	May cause skin irritation. Symptoms may include redness, drying, defatting, and cracking of the skin.
Symptoms/Injuries after Eye Contact	May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/Injuries after Ingestion	May be harmful if swallowed. May cause stomach distress, nausea, or vomiting.

Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately.

Section 5: Fire-fighting Measures

Suitable extinguishing media	Use foam, dry chemical, or carbon dioxide.
Special hazards arising from the substance or mixture	Carbon oxides
Protective actions fire-fighters	Wear standard protective equipment and self-contained breathing apparatus for firefighting if necessary.
Further information	Use water spray to cool unopened containers.

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent spills or contaminated rinse water from entering sewers or watercourses.

Methods and materials for containment and cleaning up

In case of small spills, absorb with inert materials and dispose of according to local regulations

In case of large spills, dike the spill, if possible. Absorb the liquid and dispose of according to local regulations.

Reference to other Sections For personal protection reference section 8. For disposal reference section 13.

Section 7: Handling and Storage

Precautions for safe handling

Wear proper protective equipment when handling this material
Avoid contact with skin, eyes, or clothing
Wash hands and face after handling this material
Appropriate container should be used for disposal
For precautions, see section 2.

Conditions for safe storage, including any incompatibilities

Store upright in a cool, dry place
Keep container closed when not in use
Do not store with strong acids or oxidizers
Utilize chemical segregation
Keep out of reach of children
Follow all applicable local regulations for handling and storage

Section 8: Exposure Controls/Personal Protection

Control Parameters

Contains no substances with occupational exposure limit values.

Exposure controls

VENTILATION:

Always provide good general, mechanical room ventilation where this chemical/material is used.

SPECIAL VENTILATION CONTROLS:

None

RESPIRATORY PROTECTION:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or the CEN European Standards (EU). Use a NIOSH/MSHA or European Standard (EN) approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

PROTECTIVE GLOVES:

Neoprene, butyl, or nitrile rubber gloves are recommended.

EYE PROTECTION:

Recommend eye protection using safety glasses or goggles.

SKIN PROTECTION:

Suitable protective clothing to prevent skin contact

WORK/HYGIENE PRACTICES:

Avoid contact with eyes. Wash hands after handling.

OTHER EQUIPMENT:

Make safety shower, eyewash stations, and hand washing equipment available in the work area.

Section 9: Physical and Chemical Properties

PRODUCT CRITERIA	
APPEARANCE - COLOR:	Green
PHYSICAL STATE:	Liquid
ODOR:	Marine
ODOR THRESHOLD	No data available
PH	3.5 – 4.0
MELTING POINT/FREEZING POINT:	Approx. 0 °C (32 °F)
INITIAL BOILING POINT AND BOILING RANGE:	Approx. 100°C (212°F)
FLASH POINT:	No data available
EVAPORATION RATE:	No data available
FLAMMABILITY (Solid, gas)	No data available
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	Not Measured
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C):	1.03 g/mL
SOLUBILITY(IES)	Water soluble
OXIDIZING PROPERTIES	No data available
PARTITION COEFFICIENT: n-octanol/water	No data available
AUTO IGNITION TEMPERATURE	No data available
DECOMPOSITION TEMPERATURE	No data available
VISCOSITY	No data available
EXPLOSIVE PROPERTIES	No data available

Section 10: Stability and Reactivity

Reactivity:	Not reactive
Chemical Stability:	Stable under recommended conditions. However, high temperature and UV light decomposes the material.
Possibility of Hazardous Reactions:	Will not occur under normal temperatures and pressures.
Conditions to Avoid:	No data available.
Incompatibility (Materials to Avoid):	Oxidizing agents.
Hazardous Decomposition Products:	No data available.

Section 11: Toxicological Information

There is no toxicological information available for the product.

Acute Toxicity:

Component	Acute Toxicity		
	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phosphoric acid	1530 mg/kg (Rat)	2740 mg/kg (Rabbit)	1.689 mg/L (Rabbit)
Potassium sorbate	3200 mg/kg (Rat)	Not listed	Not listed
Sodium benzoate	4070 mg/kg (Rat)	>2000 mg/kg (Rat)	12.2 mg/L (Rat)

GHS Required Criteria	Toxicity Criteria	Toxicity Information	Comments	Chemical Constituent
Skin Corrosion/Irritation		Data not available		
Serious Eye Damage / Eye Irritation		Data not available		
Respiratory or Skin Sensitization		Data not available		
Germ Cell Mutagenicity		Data not available		
Carcinogenicity	NTP	Not listed		
	IARC	Not listed		
	OSHA	Not listed		
Reproductive Toxicity		Data not available		
STOT -- Single Exposure		Data not available		
STOT -- Repeated Exposure		Data not available		
Aspiration Hazard		Data not available		

STOT = Specific Target Organ Toxicity

Section 12: Ecological Information

	Chemical Constituent
Toxicity:	Data not available
Persistence and degradability:	No information is available.
Bioaccumulative potential	No information is available.
Mobility in soil:	No information is available.
PBT and vPvB assessment:	PBT/vPvB assessment not available as chemical assessment not required/not conducted
Other adverse effects:	No information is available.

Section 13: Disposal Considerations

Waste from residues/unused products: Follow the waste disposal requirements of your country, state, or local authorities.

Contaminated packaging: Contaminated packaging material should be disposed of as stated above for residues and unused product.

Rinsate: Do not dispose of rinse water containing product in stormwater drainage systems.

Section 14: Transport Information

DOT TRANSPORT: Not Regulated

ADR = International Carriage of Dangerous Goods by Road Not Regulated

SEA TRANSPORT: IMDG Not Regulated

AIR TRANSPORT: IATA/ICAO Not Regulated

Section 15: Regulatory Information

TOXIC SUBSTANCE CONTROL ACT (TSCA) STATUS:

This product is in compliance with rules, regulations, and orders of TSCA. All components are either listed on a federal chemical inventory or are considered exempt.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the Emergency Planning and Community Right To Know Act of 1986 and 40 CFR 372. This information must be included in all SDS's that are copied and distributed for the material.

The Section 313 toxic chemicals contained in this product are: None

CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 chemical(s) under the statute.

The California proposition 65 chemical(s) contained in this product are: None

STATE RIGHT-TO-KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LIST:

Massachusetts's hazardous substance(s):	Not listed
Pennsylvania hazardous substance code(s):	Not listed
New Jersey	Not listed

CANADA:

WHMIS-2015: This SDS is in compliance with WHMIS 2015 (HPR / new HPA).

EUROPEAN UNION:

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Regulation (EC) No 1272/2008 on classification, labeling, and packaging (CLP) of substances and mixtures.

Section 16: Other Information

Initial issue date:	October 23, 2019
Final revision date:	April 13, 2023
Revision Number:	2
Revision explanation:	addition of sodium benzoate and potassium sorbate to ingredient list and section 11 acute toxicology information
Information Sources:	RTECS, ECHA, REACH, OSHA 29CFR 1910.1200

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