

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: FORMULA: PRODUCT USE: **PhycoTerra**[®] **ST** Preparation/Mixture For use as a seed treatment

MANUFACTURER'S NAME: Heliae Development, LLC 618 E Germann Rd. Gilbert, AZ 85297 EMERGENCY TELEPHONE: +1 888 716 2948

Section 2: Hazards Identification

GHS HAZARD CLASS	Not Applicable. This product does not meet the physical, health, or environment 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 [®] ST	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	<2.0	7664-38-2	231-633-2	Y
Potassium Sorbate	0.1-0.9	24634-61-5	246-376-1	Y
Sodium Benzoate	0.1-0.9	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 Symptoms/Injuries after Skin Contact	May cause respiratory tract irritation. May cause skin irritation. Symptoms may include redness, drying, defatting, and cracking of the skin.
Symptoms/Injuries after Eye Contact	May cause eve irritation. Symptoms may include discomfort or pain, excess
Symptoms/Injuries after Ingestion	blinking and tear production, with possible redness and swelling. 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.

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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:

SPECIAL VENTILATION CONTROLS: RESPIRATORY PROTECTION:

PROTECTIVE GLOVES: EYE PROTECTION: SKIN PROTECTION: WORK/HYGIENE PRACTICES: OTHER EQUIPMENT: Always provide good general, mechanical room ventilation where this chemical/material is used. None 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. Neoprene, butyl, or nitrile rubber gloves are recommended. Recommend eye protection using safety glasses or goggles. Suitable protective clothing to prevent skin contact Avoid contact with eyes. Wash hands after handling. 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: Chemical Stability: UV light Possibility of Hazardous Reactions: Conditions to Avoid: Incompatibility (Materials to Avoid): Hazardous Decomposition Products: Not reactive
Stable under recommended conditions. However, high temperature and decomposes the material.
Will not occur under normal temperatures and pressures.
No data available.
Oxidizing agents.
No data available.

Section 11: Toxicological Information

There is no toxicological information available for the product. Acute Toxicity:

Acute Toxicity				
Component	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
<u>ADR = International C</u>	arriage 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:	March 8, 2024
Revision Number:	4
Revision explanation:	Manufacturer address
Information Sources:	RTECS, ECHA, REACH, OSHA 29CFR 1910.1200

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