



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

MANUFACTURER'S NAME

The McGregor Company
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DATE PREPARED: September 27, 2023

REVISION DATE: September 27, 2023

PRODUCT NAME:

SeedStart Hera

FORMULA:

Preparation/Mixture

PRODUCT USE:

For use as a supplemental seed treatment, foliar, or in-furrow application in agriculture.

Section 2: Hazards Identification



GHS Hazard Class

Acute toxicity (Oral): Category 5
Acute toxicity (Dermal): Category 5
Eye irritation: Category 3

Signal word:

WARNING

Hazard Statement:

H302: Harmful if swallowed.
H313: May be harmful in contact with skin.
H320: Causes eye irritation.

Precautionary Statements:

Prevention

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.
P264: Wash skin thoroughly after handling.

Response

P270: Do not eat, drink, or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P313+P330: IF SWALLOWED: Rinse mouth. Call a poison center or doctor/physician if you feel unwell.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

P337+P313: If eye irritation persists, get medical advice/attention.
P391: Collect spillage. Hazardous to the aquatic environment.
P405: Store locked up.
P410+P412: Protect from sunlight. Do not expose to temperature exceeding 122°F (50°C) or store at temperatures below 40°F (4°C).

Disposal

P501: Dispose of contents/container in accordance with the waste disposal requirements of your country, state, or local authorities.

Hazards not otherwise classified (HNOC) or not covered by GHS - None

HAZARD CLASSIFICATION:

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

FIRE AND EXPLOSION:

Not considered flammable or combustible. Product emits toxic fumes when burned.

POTENTIAL HEALTH EFFECTS:

<1 % of mixture consists of ingredients of unknown acute toxicity.

APPEARANCE:

Dark brown soluble liquid.



NFPA RATING:

Component	Health (Blue)	Flammability (Red)	Reactivity (Yellow)	Special (White)
SeedStart Hera	1	0	0	----

Section 3: Composition, Information on Ingredients

PRODUCT COMPOSITION	APPROX %	CAS NO.	EC NUMBER	CANADA DSL
Water	< 50*	7732-18-5	231-791-2	Y
Monoammonium phosphate	< 3%	7722-76-1	231-764-5	Y
Zinc EDTA	< 1%*	14025-21-9	237-865-0	Y
Sodium molybdate	<2%*	10102-40-6	231-551-7	Y
Salicylic Acid	*	69-72-7	200-712-3	Y
Kelp (<i>Ecklonia maxima</i>)	*	-	-	-

*Some items on this SDS may be designated as trade secrets (TS). Bonafide requests for disclosure of trade secret information to medical personnel must be made in accordance with the provisions contained in 29 CFR 1910.1200 I 1-13.

Section 4: First Aid Measures

Description of First Aid Measures

General Information	Contact with eyes or skin may cause irritation. Undiluted material will be irritating on direct contact with eyes. Clothing should be thoroughly washed before re-use.
Inhalation	Remove to fresh air. Get immediate medical attention if breathing becomes difficult.
Skin Contact	Immediately wash skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing. Get medical attention if irritation develops or persists.
Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing. Get immediate medical attention if irritation persists.
Ingestion	Do NOT induce vomiting. Rinse mouth thoroughly with water. Give ½ to one glass of water to dilute the material if victim is alert and not convulsing. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomits, rinse mouth and administer more water. Never give anything 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 mild skin irritation. Symptoms may include redness, drying, defatting, and cracking of the skin.
Symptoms/Injuries after Eye Contact	Causes mild eye irritation. Symptoms may include discomfort or pain, excess blinking, and tear production, with possible redness and swelling.
Symptoms/Injuries after Ingestion	Mildly harmful if swallowed.

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, carbon dioxide, or any media suitable to extinguish the surrounding fire.

Unsuitable extinguishing media

Do not use water jet as an extinguisher.

Special hazards arising from the substance or mixture

Containers could explode when heated above 225°F (107°C). Gases hazardous to health could be formed.

Protective actions fire-fighters

Self-contained breathing apparatus and full protective clothing for firefighting is necessary.

Further information

Hazardous decomposition products formed under fire conditions. – metal oxides, sulfur oxides

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing fumes. Ensure adequate ventilation. Avoid contact with eyes or skin.

Environmental precautions

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

Methods and materials for containment and clean-up

In case of small spills, absorb with sand or other non-combustible absorbent material and put spilled material in a plastic container. Dispose of according to the requirements of your country, state, or local authorities.

In case of large spills, dike far ahead of liquid spills. Absorb with inert material and put into a plastic container. Dispose of according to the requirements of your country, state, or local authorities.

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

Section 7: Handling and Storage

Precautions for safe handling

Use only with adequate ventilation.

Keep out of reach of children.

Wear proper protective equipment when handling this material.

Avoid contact with skin, eyes, or clothing.

Wash hands and face after handling this material.

A plastic 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 below 40°F (4°C)

Keep away from heat exceeding 225°F (107°C).

Do not store with acid, metallic oxide, amines, and combustible materials.

Utilize chemical segregation.

Follow all applicable local regulations for handling and storage.

Specific uses

This product is intended to be used for seed treatments.

Section 8: Exposure Controls/Personal Protection

Control Parameters



This product contains no substances with occupational exposure limit value.

Exposure controls

VENTILATION:	Always provide good general, mechanical room ventilation where this chemical/material is used.
SPECIAL VENTILATION CONTROLS:	None.
EXPOSURE CONTROLS	Avoid uncontrolled release to the environment.
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 breathing fumes. 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:	Dark brown
PHYSICAL STATE:	Soluble liquid
ODOR:	Pungent Odor
ODOR THRESHOLD	No data available
PH	No data available
MELTING POINT/FREEZING POINT:	No data available
INITIAL BOILING POINT AND BOILING RANGE:	> 100°C
FLASH POINT:	No data available
EVAPORATION RATE:	No data available
FLAMMABILITY (Solid, gas)	Not flammable
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 (8.60 lbs/gal)
SOLUBILITY(IES)	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

Section 10: Stability and Reactivity

Reactivity:	Not reactive under normal conditions of use, storage, and transport.
Chemical Stability:	Stable under recommended conditions.
Possibility of Hazardous Reactions:	Will not occur under normal temperatures and pressures.
Conditions to Avoid:	High temperatures, high pressure, incompatible materials (strong oxidizer, reactive metals), ignition sources..
Incompatibility (Materials to avoid):	This product is compatible with most agricultural remedies. However, it is advisable to do a miscibility test prior to mixing with other chemicals. Do not mix concentrate directly with other herbicides or pesticides concentrates – always dilute first. Do not mix product with oxidizing materials or with any phosphate containing fertilizers.
Hazardous Decomposition Products:	Decomposition products include carbon dioxide, carbon monoxide, and water which may form when heated to decomposition.



Section 11: Toxicological Information

GHS Required Criteria	Toxicity Criteria	Toxicity Information	Comments	Chemical Constituent
Acute Toxicity	LD50 (Oral/Mouse)	2500 mg/kg	No Mortality	Sodium Molybdate
	LD50 (Oral/Rat)	>2000 mg/kg		Sodium Molybdate
	LC50(Inhalation/Mouse):	> 5.25 mg/L, 4 hr.		Sodium Molybdate
Skin Corrosion/Irritation	May cause mild irritation			Zinc EDTA Monoammonium phosphate
Serious Eye Damage / Eye Irritation	May cause mild irritation			Zinc EDTA Monoammonium phosphate
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:	LC50 Oncorhynchus mykiss (rainbow trout) 800 mg/L, 96hr.	Sodium Molybdate
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

Disposal Method: Do not reuse containers. Triple rinse (or equivalent), then offer for recycling at an ACRC site (www.agrecycling.org for locations), or puncture and dispose of in a sanitary landfill or by other procedures approved your country, state, or local authorities.

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 a sanitary sewer system or stormwater drainage system.

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 the rules, regulations, and orders of TSCA. All components are either listed on the TSCA 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):	None
Pennsylvania	None
New Jersey	None

CANADA:

WHMIS-2015: This SDS complies 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:	September 27, 2023
Final revision date:	September 27, 2023
Revision Number:	0
Revision explanation	Initial version.
Information Sources:	RTECS, ECHA, REACH, OSHA 29CFR 1910.1200

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