SAFETY DATA SHEET

Bio-Iron

Agricultural Mineral & Soil Inoculant

I. IDENTIFICATION

General Use:	Soil Amendment
Common Name:	Bio-Iron
Manufacturer:	Blacksmith BioScience Inc
	504 Spring Hill Dr #440
	Spring Texas 77386
Emergency Tel#	855-971-2669

II. HAZARD INFORMATION

A. Toxicity:	none
B. Carcinogenicity:	N/A not listed by NTP, LARC, OSHA, ACGIH, ORHIOSH
C. Primary Route(s) of Exposure:	Skin Contact, Ingestion
D: Health Effects of Over Exposure:	
1. Inhalation:	Nasal Irritation
2. Ingestion:	Irritation of mucous membranes.
3. Skin:	No negative side effects. Wash with soap and water.
4. Eyes:	Slight irritation may occur. Flush with water.

III. COMPOSITION AND INFORMATION ON INGREDIENTS

Components

1) Bacillus blend (B. subtilis, B. licheniformis, B. amyloliquefaceans,)
2) Streptomyces nigrescens
3) iron humate

IV. FIRST AID MEASURES:

1. Inhalation:	Flush nose with water
2. Ingestion:	Induce vomiting; consult physician
3. Skin:	Wash with soap and water.
4. Eyes:	Flush with water for five minutes

V. FIRE-FIGHTING MEASURES

A. Fire:	Not considered a fire hazard.
B. Explosion:	Not considered an explosion hazard.
C. Fire Extinguishing Media:	Water, CO2, or dry chemicals may be used.
D. Precautions:	No precautions are necessary under normal conditions of use. As with any dust avoid high concentrations

VI. ACCIDENTAL RELEASE MEASURES

General: Take all additional action necessary to prevent and remedy the adverse effects of the spill.

Specific: In case of spill, collect material immediately. Wipe residual material from surfaces with cloth. Do not wash residues into drains or other waterways.

VII. HANDLING AND STORAGE

Armory may be stored in all types of containers made of various materials of construction. Avoid contact with strong oxidizing agents.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Eyes and Face:	Though not necessary, safety glasses may be worn.
B. Respiratory:	No respirator is required under normal conditions of use.
C. Skin:	Though not necessary, gloves may be worn.
D. Shoes:	Safety shoes are not necessary.

IX. PHYSICAL & CHEMICAL PROPERTIES

Bulk Density:	55-65 lb/ cubes ft
Solubility in H2O:	none
pH (apparent):	5.0-6.5

Form:	Solid powder
Appearance:	dark Chocolate brown
Odor:	Slight peat aroma
Boiling Point (degC):	N/A
Melting Point (degC):	N/A
Evaporation Rate:	N/A
Vapor Pressure:	N/A

X. STABILTITY AND REACTIVITY

Stabiity:	Stable under normal recommended storage and handling conditions
Hazardous Polymerization	Will not occur
Incompatibility	Strong acidic materials

XI. TOXICOLOGY INFORMATION

This section is intended for use by toxicologists and other health professionals.
Data obtained on similar products and on components are summarized below.

Acute oral toxicity
Rat, LD50: > 5,050 mg/kg body weight Practically non-toxic.
Acute dermal toxicity
Rat, LD50: > 5,050 mg/kg body weight Practically non-toxic.
Skin irritation
Rabbit, Non-irritating
Eye irritation
Rabbit: none observed
Acute inhalation toxicity
Rat, LC50: > 5,050mg/kg Practically non-toxic.
Skin sensitization
Guinea pig, Buehler test: Sensitizer
Mutagenicity
In vitro and in vivo mutagenicity test(s): None observed.
Carcinogenicity
None observed
Toxicity to reproduction/fertility
None observed
Developmental toxicity/teratogenicity
None observed

XII. ECOLOGICAL INFORMATION

Active ingredient is practically non-toxic, non-allergenic and non-pathogenic to fish, non-target insects, non-target plants and freshwater invertebrates.

XIII. DISPOSAL CONSIDERATIONS

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Dispose of empty container in a sanitary landfill or by incineration or, if allowed by state or local authorities, by burning. If burned, stay out of smoke.

XIV. TRANSPORT INFORMATION

A. DOT Shipping Name:	None
B. DOT Hazard Class:	None
C. DOT Category:	None
E. Reportable Qualities (RQ):	None
F. HMIS: Personal Protective Code -	A (Safety Glasses)
G. NFPA Rating:	0 (Health) - 0 (Flammability) - 0 (Reactivity)

XV. REGULATORY INFORMATION

United States - Not regulated

SARA Hazard Class	None
SARA 313	NO
SARA 302	NO
CERCLA	NO
RQ	NONE
RCRSA	NO

XVI OTHER INFORMATION

This information presented in this Safety Data Sheet (SDS) is subject to revisions and is not all-inclusive, but represented as the best information available to date. This information was drawn from recognized sources, believed to be reliable. However, company will not be responsible for damages of any kind resulting from the use or reliance upon such information. The product discussed is sold without warranty, expressed or implied, and upon conditions that purchasers shall perform their own verification and testing to determine its suitability for a particular purpose.

Contact: Blacksmith BioScience Inc
504 Spring Hill Dr #440
Spring Texas 77386

Effective Date: April 1, 2021