



## BIOMEND® 3-4-3 STARTER

### SAFETY DATA SHEET

CURRENT AS OF: 3/7/25

#### SECTION 1: PRODUCT / SUPPLIER IDENTIFICATION

PRODUCT CODE: 10010384

PRODUCT NAME: BIOMEND® 3-4-3 STARTER

PRODUCT USE: Fertilizer

MFR INFO: The Andersons, Inc.  
PO Box 119  
Maumee, OH 43537

FOR EMERGENCY: (800) 757-8951

FOR INFORMATION: (419) 893-5050

#### SECTION 2: HAZARDS IDENTIFICATION

HAZARD SYMBOL:



SIGNAL WORD: WARNING

HAZARD STATEMENT: CAUSES SERIOUS EYE, SKIN, AND RESPIRATORY IRRITATION.

#### HAZARD CLASSIFICATIONS

*EYE IRRITATION*

*SKIN IRRITATION*

*SPECIFIC TARGET ORGAN TOXICITY*

- *SINGLE EXPOSURE*

#### CATEGORY

2A

2

3

#### INTERPRETATION

Causes serious eye irritation

Causes skin irritation

Causes irritation to respiratory tract

#### PRECAUTIONARY STATEMENTS:

- *WEAR PROTECTIVE GLOVES AND CLOTHING*
- *REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE*
- *AVOID BREATHING DUSTS*
- *IF INHALED: MOVE TO FRESH AIR AND KEEP COMFORTABLE. SEEK MEDICAL ATTENTION IF UNWELL*
- *USE ONLY OUTDOORS OR IN WELL-VENTILATED AREA*
- *CALL POISON CONTROL OR SEEK MEDICAL ATTENTION IF YOU FEEL UNWELL*
- *WASH THOROUGHLY AFTER HANDLING*
- *DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT*
- *IF SWALLOWED: RINSE MOUTH. SEEK MEDICAL ATTENTION IF UNWELL.*
- *IF IN EYES OR ON SKIN: RINSE AREA WITH PLENTY OF WATER, REMOVE CONTACT LENSES AND SEEK MEDICAL ATTENTION.*
- *IF EYE OR SKIN IRRITATION CONTINUES: SEEK MEDICAL ATTENTION*

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

<b><u>CHEMICAL IDENTITY</u></b>	<b><u>SYNONYM</u></b>	<b><u>CAS NUMBER</u></b>	<b><u>CONCENTRATION (%)</u></b>
Rock Phosphate	Apatite	1306-05-4	40-50
BioChar	Carbon	7440-44-0	00-10
Humic Acid		1415-93-6	00-10
Iron Sulfate		7720-78-7	00-10

**SECTION 4: FIRST AID MEASURES**

IF INHALED:	Move to fresh air and keep comfortable, seek medical attention if unwell.
IF ON SKIN:	Wash affected areas with soap and water. Seek medical attention if irritation persists. Wash contaminated clothing before re-use.
IF IN THE EYES:	Immediately flush with water for 15-20 minutes, remove contact lenses if present and easy to do – continue rinsing. Seek medical attention if irritation persists.
IF SWALLOWED:	Rinse mouth. DO NOT INDUCE VOMITING unless directed by a medical professional. Seek medical attention if unwell.
SPECIAL TREATMENT:	None known
HEALTH HAZARDS:	See Section 11

**SECTION 5: FIREFIGHTING MEASURES**

EXTINGUISHING MEDIA:	Use media suitable for surrounding fire. No special media required.
SPECIFIC FIRE HAZARDS:	When heated to decomposition, this product will emit toxic oxides/fumes, and sulfides.
SPECIAL FIREFIGHTING PROCEDURES:	Wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA).

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

SPILL / RELEASE PROCEDURES:	Contain material and place in containers for use as intended, or discard according to Federal, State and Local regulations.
ENVIRONMENTAL PRECAUTIONS:	Prevent spilled material from entering storm drains or water bodies. If material enters a waterway, notify the appropriate authorities.
PROTECTIVE EQUIPMENT:	Wear PPE according to Section 8

**SECTION 7: HANDLING AND STORAGE**

Wash hands after handling material. Do not eat, drink or smoke while handling the material. Avoid breathing dusts. Not intended for human consumption. Do not store with food or feedstuffs. Store in a cool, dry, well-ventilated area away from incompatible materials.

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

The following constituents are the only constituents of the product, which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

**HAZARDOUS COMPONENT****OSHA PEL****ACGIH TLV**

Ferrous Sulfate

1 mg/m<sup>3</sup> (TWA)1 mg/m<sup>3</sup> (TWA) (NIOSH)PERSONAL PROTECTIVE EQUIPMENT / PROTECTION MEASURES / CONTROLS:

RESPIRATORY PROTECTION: NIOSH approved respirator, if required

EYE PROTECTION: Safety glasses with sideshields, goggles, or faceshield

SKIN PROTECTION: Appropriate for the task. Impervious and compatible with material

VENTILATION: Use with adequate ventilation

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR: Tan, black, and brown granules with sweet odor

pH: Not applicable

MELTING POINT: Not applicable

BOILING POINT: Not available

FLASH POINT: Not flammable

EVAPORATION RATE: Not available

FLAMMABLE LIMITS: Not applicable

VAPOR PRESSURE: Not available

VAPOR DENSITY: Not available

SPECIFIC GRAVITY: Not available

SOLUBILITY (IN WATER): Soluble

PARTITION COEFFICIENT: Not available

AUTOIGNITION TEMP: Not available

DECOMPOSITION TEMP: Not available

ODOR THRESHOLD: Not available

VISCOSITY: Not available

**SECTION 10: STABILITY AND REACTIVITY**

STABILITY: Product is stable.

CONDITIONS TO AVOID: Heat

INCOMPATIBILITY: Strong acids, bases, and oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic oxides/fumes and ammonia.

**SECTION 11: TOXICOLOGICAL INFORMATION**

HEALTH EFFECTS: Causes serious eye, skin, and respiratory irritation.

CARCINOGENICITY: None of the ingredients are known / listed carcinogens.

**BIOMEND® 3-4-3 STARTER****INGREDIENT TOXICITY RANGES:**

ORAL: &gt; 319 mg/kg (ferrous sulfate) – 3,200 mg/kg (potassium sulfate)

DERMAL: &gt; 155 mg/kg (ferrous sulfate)

**SECTION 12: ECOLOGICAL INFORMATION**

Long-term degradation products may arise. Products of degradation are not expected to be hazardous. Excessive nutrients in waterways may cause algal blooms that may be detrimental to aquatic life.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Use product for intended purpose where possible. Dispose of in accordance with all national, regional / state, and local regulations.

**SECTION 14: TRANSPORT INFORMATION**

This product is not regulated as a transportation hazard.

**SECTION 15: REGULATORY INFORMATION****US FEDERAL REGULATIONS**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 304: This material does not contain any components with a section 304 EHS RQ.

SARA 311 / 312: Acute Health Hazard

SARA 313: The following components are subject to reporting levels established by SARA Title III, Section 313:

CHEMICAL NAME	CAS No.	% BY WEIGHT
No requirements.		

CERCLA (RQ):	CHEMICAL NAME	CAS No.	REPORTABLE QTY (lbs)
	No requirements.		

TSCA			
Chemical Name	CAS No.	US TSCA Inventory Listing	US TSCA Inactive / Active Designation
Potassium Sulfate	7778-80-5	Present	Active
Iron Sulfate	7720-78-7	Present	Active
Humic Acid	1415-93-6	Present	Active
Activated Charcoal	7440-44-0	Present	Active

**US STATE REGULATIONS**

RIGHT-TO-KNOW:	CHEMICAL NAME	CAS No.	States
	No requirements.		

CALIFORNIA PROP 65: No requirements

**SECTION 16: OTHER INFORMATION**

NFPA RATINGS:	HEALTH	1
	FLAMMABILITY	0
	INSTABILITY	0
HMIS RATINGS:	HEALTH	1
	FLAMMABILITY	0
	INSTABILITY	0

**PREPARATION & VERSION INFORMATION**

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