# SAFETY DATA SHEET - U.S. DEPARTMENT OF LABOR

May be used to comply with Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200, Standard must be consulted for specific requirements (non-mandatory form) Form Approved OMB No. 1218-0072

Date Prepared: 05-02-2017 Date Revised: 02-23-2017

## Section 1: Identification of the Substance/Preparation and of the Company/Undertaking

1.1 Product Identifier

Trade Name: Paleo

Synonyms: Humic Acid, Potassium Salt

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against It

**Recommended Uses: Plant Nutrition** 

Inadvisable Uses: None

1.3 Details of the Distributor of the Safety Data Sheet

Distributed By: Branch Creek Organics, LLC™

PO Box 523

Harleysville, PA 19438

888-408-5433

Country: United States

1.4 In Case of Emergency: Infotrac at 800-535-5053

## Section 2: Hazards Identification

2.1 Classification of the Substance or Mixture:

**CLP Classifier- Other Information:** This Product Does Not Have to be Classified.

2.2 Label Elements: N/A2.3 Other Hazards: N/A2.4 OSHA PEL: None known2.5 ACGIH TLV: None known

2.6 GHS Label Elements: Non-Regulated Material

## Section 3: Composition/Information on Ingredients

#### 3.2 Mixtures

Substance	CAS No	EC No	REACH Reg No	Concentration	Notes	DSD- Classification	CLP - Classification	
Proprietary								

Please see Section 16 for the full text of R-Phrases and H-Phrases

Section 4: First Aid Measures

#### 4.1 Description of First Aid Measures

**Inhalation:** Seek fresh air, wash out mouth with water and blow nose thoroughly. **Ingestion:** Wash out mouth thoroughly and drink 1-2 glasses of water in small sips.

**Skin Contact:** Wash the skin with water. Remove contaminated clothing.

**Eye Contact:** Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.

- 4.2 Most Important Symptoms and Effects, Both Acute and Delayed: None known
- 4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed: None

## Section 5: Fire-Fighting Measures

- 5.1 Special Fire Fighting Procedures: None
- 5.2 Fire and Explosion Hazards: None
- 5.3 Suitable Extinguishing Media: N/A
- 5.4 Unsuitable Extinguishing Media: N/A

#### Section 6: Accidental Release Measures

- **6.1 Personal Precautions:** Use personal protection recommended in Section 8.
- **6.2 Environmental Precautions:** Avoid infiltration of large quantities into drains, surface water, ground water and soil.
- **6.3 Methods and Material for Containment and Clean Up:** Sweep up/collect spills for possible reuse Or transfer to suitable waste containers.
- 6.4 Reference to Other Sections:

See section 8 for type of protective equipment. See section 13 for instructions on disposal.

# Section 7: Handling and Storage

- 7.1 Precautions for Safe Handling: No special requirements. Avoid contact with skin and eyes.
- **7.2 Storage:** Recommended that product not be subject to freezing.

#### Section 8: Exposure Controls/Personal Protection

#### 8.1 Control Parameters:

Occupational Exposure Limit: Contains no substances subject to reporting requirements.

#### 8.2 Exposure Controls:

**Appropriate Engineering:** Provide sufficient ventilation during operations which cause vapour formation **Personal Protective Equipment:** 

**Eye Protection:** Wear safety goggles if there is a risk of eye splash.

Hand Protection: Wear Gloves.

**Skin Protection:** Wear suitable protective clothing.

Respiratory Protection: Not Required

## Section 9: Physical and Chemical Properties

**9.1 Physical State/Appearance/Odor:** Brown Liquid with slight odor.

# 9.2 Information on Basic Physical and Chemical Properties:

Parameter	Value/Unit	Remark
pH (solution for use)	2-3	
pH (concentrate)		Not Applicable
Melting Point		Not Applicable
Initial Boiling Point	104C/215F	
Freezing Point	-2C/28F	
Flash Point		Not Applicable
Evaporation Rate	0.4	Water
Flammability (solid, gas)		Not Applicable
Flammability Limits		Not Applicable
Explosion Limits		Not Applicable
Vapour Pressure	14.2 mmHg	20C/68F
Vapour Density(Air = 1)	1.21	20C/68F
Relative Density	1.109	Specific Gravity(25C/77F)
Partition Coefficient N-Octonol/Water		100% Water
Auto-Ignition Temperature		Not Applicable
Decomposition Temperature		Not Applicable
Viscosity	< 600 cSt	
Odour Threshold	ppm	Not Applicable
Solubility in Water	100% Soluble	
% Volatiles By Weight	8o (Water)	
Bulk Density (g/ml)		Not Applicable

# Section 10: Stability and Reactivity

10.1 Reactivity: Not Reactive

10.2 Chemical Stability: Stable

10.3 Possibility of Hazardous Reactions: None Known

10.4 Conditions to Avoid: None Known

10.5 Incompatible Materials: Strong Oxidizers

10.6 Hazardous Decomposition Products: None known

10.7 Hazardous Polymerization: Will Not Occur

## Section 11: Toxicological Information

#### 11.1 Information on Toxicological Effects:

Acute Toxicity – Oral Humic Acid, Potassium Salt

Skin Corrosion/Irritation: May cause slight irritation

**Serious Eye Damage/Eye Irritation:** May cause slight irritation **Respiratory Sensitization or Skin Sensitization:** None known

Germ Cell Mutagenicity: Based on existing data, the classification criteria are deemed not to have been met.

**Carcinogenic Properties:** The product does not have to be classified.

## Section 12: Ecological Information

12.1 Toxicity

12.2 Persistence and Degradability: Potentially degradable.

12.3 Bioaccumulative Potential: No bioaccumulation expected

**12.4 Mobility in Soil:** Solubility in water: Completely miscible

**12.5 Results of PBT and vPvB Assessment:** This product does not contain any PBT or vPvB substances.

12.6 Biological Oxygen Demand (BOD): Not known 12.7 Chemical Oxygen Demand (COD): Not known

12.8 Other Adverse Effects: None known

## Section 13: Disposal Considerations

**13.1 Waste Treatments Methods:** This product is not to be considered Hazardous Waste.

Dispose of in accordance with Local Authority requirements.

## Section 14: Transport Information

**14.1 UN-No:** Not applicable

14.2 UN Proper Shipping Name: Class 50

14.3 Transport Hazard Class(es): Not applicable

**14.4 Packaging Group:** Not applicable

14.5 Environmental Hazards: Not applicable

**14.6 Special Precautions for User:** None

14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code: Not applicable

Other Information: Harmonized Tariff Code for US: 3804.00.1000-0

Section 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Special Provisions: ADR/RID (2007) ECHA FAQ 7.7. GHS/CLP (EC NO1272/2008) GHS USA June, 2015.

**Authorizations / Limitations:** Global Inventory Status

**15.2 Chemical Safety Assessment:** This product does not have to be classified.

## Section 16: Other Information

16.1 HMIS Rating (0-4): Health=1 Fire=0 Reactivity=0 Special=0

# Prepared by: Branch Creek Organics, LLC™

The information and recommendations contained herein are offered as a service to our customers but are not intended to relieve the user from its responsibility to investigate and understand pertinent sources of information and to comply with all laws and procedures applicable to the safe handling and use of these materials. The information and recommendations proved herein were believed by Branch Creek Organics to be accurate at the time of preparation or obtained from sources believed to be generally reliable. However, Branch Creek Organics makes no warranty concerning their accuracy and Branch Creek Organics will not be liable for claims relating to any party's use of reliance on information or recommendations contained herein, regardless of whether it is claimed that the information or recommendations are inaccurate, incomplete or otherwise misleading.



According to OSHA HCS

FILE NO.: Nucleus Complete Revision date: May 2, 2017

Creation date: November 06, 2014



#### 1 Identification

Product identifier

Trade name: Nucleus Complete

Relevant identified uses of the substance or mixture and uses advised against Application of the substance / the mixture

Microbial-based liquid formula for use in agriculture providing nutrient absorption enhancement and biological nitrogen fixation.

Details of the supplier of the safety data sheet

Distributed By:

Branch Creek Organics, LLC™

ADDRESS: PO Box 523

Harleysville, PA 19438

TELEPHONE: 888-408-5433

Information department: Product Safety Department.

Emergency telephone number: +52 642-425-52-30 Ext 114/119, +47 48 95 95 20 (Norway)

#### 2 Hazard(s)identification

Classification of the substance or mixture

This product is not classified according to the Globally Harmonized System (GHS).

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not applicable

Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of international guidelines.

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements

Labeling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.



#### According to OSHA HCS

FILE NO.: Nucleus Complete Revision date: May 2, 2017

Creation date: November 06, 2014



Classification system:

NFPA and HMIS ratings (scale 0 - 4)



Health = 0 Fire = 1 Reactivity = 0

Other Hazards

Results of PBT and VPvB assessment

PBT: Not applicable vPvB: Not applicable

#### 3 Composition/information on ingredients

Chemical characterization: Mixture

Description: Live non-pathogenic soil microorganisms in an inert carrier.

Dangerous components: Void

#### 4 Firstaidmeasures

Description of first aid measures

General information: No special measures required.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Immediately rinse with water. If skin irritation continues, consult a

doctor.

After eye contact: Check for and remove contact lenses. Rinse opened eye for several

minutes under running water. Then consult a doctor.

After swallowing: Rinse out mouth and then drink plenty of water. Do not induce

vomiting; call for medical help immediately. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Most important symptoms and effects, both acute and delayed:

No further relevant information available.

Information for doctor: Treat symptomatically and supportively.

Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

#### 5 Firefightingmeasures

Extinguishing media

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture:

No further relevant information available.

Advice for firefighters

Protective equipment:

Wear fully protective suit. Wear self-contained respiratory protective device. Do not inhale explosion gases or combustion gases.



## According to OSHA HCS

FILE NO.: Nucleus Complete Revision date: May 2, 2017

Creation date: November 06, 2014



#### 6 Accidental releasemeasures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Environmental precautions: Dilute with plenty of water.

Methods and material for containment and cleaning up:

Use absorbent material, then wash area with soapy water.

Disinfect spill area with clean water to which household bleach is added at a rate of 100 mL per 20  $\,$ 

liters (one half cup per five gallons).

Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protective equipment.

See Section 13 for disposal information.

#### 7 Handlingandstorage

Precautions for safe handling:

Prevent formation of aerosols.

Ensure good ventilation/exhaustion in the workplace.

Do not dilute or add any other substance except as specified in Branch Creek Organics product use instructions.

Information about fire and explosion protection: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

Further information about storage conditions:

Protect from frost.

Protect from heat and direct sunlight.

Store in a cool dry place between the temperatures of  $2^{\circ}$ C /  $35.6^{\circ}$ F and  $48^{\circ}$ C /  $118.4^{\circ}$ F away from direct sunlight.

The product will freeze at -10°C / 14°F.

Specific end use(s): No further relevant information available.

#### 8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see Section 7.

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Exposure controls** 

Personal protective equipment:

Select PPE appropriate for the operations taking place taking into account the product properties.



## According to OSHA HCS

FILE NO.: Nucleus Complete Revision date: May 2, 2017

Creation date: November 06, 2014



General protective and hygienic measures:

Wash hands before breaks and at the end of work. Avoid close or long-term contact with the skin.

Avoid contact with the eyes.

Do not inhale gases/fumes/aerosols.

Do not eat, drink, smoke, or sniff while working.

Breathing equipment: Not required.

Protection of hands:

Wear impervious gloves that provide comprehensive protection, e.g. PVC or rubber.

Eye protection: None required, safety glasses if desired.

Body protection: Protective work clothing. Body protection must be chosen depending on product

properties, activity and possible exposure.

#### 9 Physical and chemical properties

Information on basic physical and chemical properties

General information

**Appearance** 

Form: Fluid
Color: Brown
Odor: Mild

Odor threshold: Not determined

pH value: 3.5-4.5

Change in condition

Melting point/melting range: -10 °C (14 °F)
Boiling point/boiling range: 100 °C (212 °F)

Flash point: Cannot support combustion

Flammability: (solid, gaseous): Not applicable

Ignition temperature:

Decomposition temperature: Not determined

Self-igniting: Product is not self-igniting

Danger of explosion: Product does not present an explosion hazard

**Explosion limits** 

Lower: Not determined Upper: Not determined Vapor pressure at 20°C (68 °F): Not determined

Density at 20°C (68 °F): 1.0-1.2 g/cm<sup>3</sup> (8.35-10.01 lbs/gal)

Relative density:

Vapor density:

Evaporation rate:

Not determined

Not determined

Solubility in / miscibility with water: Dispersible Partition coefficient (n-octanol/water): Not determined



FILE NO.: Nucleus Complete Revision date: May 2, 2017

Creation date: November 06, 2014

According to OSHA HCS



Viscosity

Dynamic: Not determined Kinematic: Not determined

Solvent content:

Organic solvents: 0.00% 0.00% VOC (EC):

Other information: No further relevant information available.

#### 10 Stabilityandreactivity

Reactivity

Chemical stability

Thermal decomposition/conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No further relevant information available.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products:

Organic matter under decomposition/combustion may produce:

- Carbon monoxide and carbon dioxide.
- Sulfur oxides (SO<sub>x</sub>).
- Nitrogen oxides (NO<sub>x</sub>).

### 11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect

- On the skin: No irritating effect.
- On the eye: No irritating effect.

Sensitization: No sensitizing effects known.

#### Additional toxicological information:

- The product is not subject to classification according to internally approved calculation methods
- When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

## Carcinogenic categories

- IARC (International Agency for Research on Cancer) None of the ingredients are listed.
- NTP (National Toxicology Program) None of the ingredients are listed.
- OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients are listed.



#### According to OSHA HCS

FILE NO.: Nucleus Complete Revision date: May 2, 2017

Creation date: November 06, 2014



#### 12 Ecologicalinformation

Toxicity

Aguatic toxicity: No further relevant information available.

Persistence and degradability: Easily biodegradable.

Bioaccumulative potential: Product is not expected to bioaccumulate.

Mobility in soil: No further relevant information is available.

Additional ecological information

General notes: Generally not hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicablevPvB: Not applicable

Other adverse effects: No further relevant information available.

#### 13 Disposal considerations

Waste treatment methods

Recommendation

**Recommended Hierarchy of Controls:** 

- Minimize waste.
- Reuse if not contaminated.
- Recycle, if appropriate, or
- Safe disposal (if all else fails).

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state or international legislation.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

#### 14 Transportinformation

**UN-Number** 

DOT, ADR, ADN, IMDG, IATA: Void

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA: Void

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA: Void

Packing group

DOT, ADR, IMDG, IATA: Void

Environmental hazards Marine pollutant: No

Special precautions for user: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.



## According to OSHA HCS

FILE NO.: Nucleus Complete Revision date: May 2, 2017

Creation date: November 06, 2014



Transport/additional information: Not dangerous according to the above specifications.

UN "Model Regulation":

#### 15 Regulatoryinformation

Safety, health and environmental regulations/legislation specific for the substance or mixture:

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Cancerogenicity categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

Product related hazard information:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

#### 16 Otherinformation

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product feature and shall not establish a legally valid contractual relationship. The information contained herein is. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor / manufacturer assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Vendor / manufacturer assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

# 1. IDENTIFICATION

<u>Product Name</u>: **Microtek 2** 

<u>Product Type</u>: Solid

Recommended / Restrictions of use: Fertilizer Micronutrient Additive

Supplier's Details: SynaTek

737 Hagey Center Drive Unit A

Souderton, PA 19422

888-408-5433

Emergency contact number:

Chemical Emergencies - 800-535-5053 Medical/Handling Emergencies - INFOTRAC

800-535-5053 USA 352-323-3500 International

## 2. HAZARDS IDENTIFICATION

Hazard Classification: This material is hazardous under the criteria of the Federal OSHA Hazard

Communication Standard 29 CFR 1910.1200.

STOT-RE – Category 2

Acute toxicity (oral) – Category 4 Eye irritant – Category 2B Skin irritant – Category 3 Reprotoxicity – Category 2

Signal word: Warning

<u>Hazard statements:</u> May cause damage to organs through prolonged or repeated exposure (H373)

Harmful if swallowed (H302) Causes eye irritation (H320) Causes mild skin irritation (H316)

Suspected of damaging fertility or the unborn child (H361)

Hazard pictograms:

<u>Precautionary statements</u>: Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood. Wear protective gloves/ protective clothing/ eye protection/ face protection/

respiratory protection to avoid direct contact. Minimize dust generation. Do not breathe dust.

Wash thoroughly after handling.

Keep away from heat, open flames, sparks, hot surfaces. No smoking.

Other hazards: None identified.

Other hazards not contributing to the classification: Spill area may be slippery.

<u>Unknown components with acute toxicity:</u> None.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture

Chemical name/component	CAS#	Concentration
Magnesium Sulfate	7487-88-9	> 30 - < 45%
Manganese Sulfate	10034-96-5	> 30 - < 45%
Iron Sulfate	17375-41-6	> 25 - < 35%
Citric Acid	77-92-9	> 10 - < 20%
Fulvic Acid	36-47-8	> 1 - < 5%
Sodium Molybdate	10102-40-6	< 1.0%
Cobalt Sulfate Monohydrate	10124-43-3	< 1.0%
Zinc Sulfate	7446-19-7	< 1.0%
Copper Sulfate	7758-99-8	< 1.0%
Sodium Borate	12280-03-4	< 1.0%

# 4. FIRST-AID MEASURES

Description of first aid measures:

Eye Contact - If in eyes: Flush with water for 15 minutes. Call a doctor for treatment if irritation persists.

Skin Contact - If on skin: Wash thoroughly with soap and water. Launder clothing before reuse.

Inhalation - If inhaled: Remove affected person from source of exposure. Call 911 if breathing is difficult.

Ingestion - If ingested: Do not induce vomiting. Get medical attention. Have the product label with you when

calling a doctor or going for treatment.

<u>Indication of any immediate medical attention and special treatment</u>

needed:

No additional information available.

## 5. FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media: Water fog, foam or spray, dry chemical, carbon dioxide, sand

Unsuitable extinguishing media: None

Special hazards arising from the

substance or mixture:

Material is not combustible. Product packaging is not self-ignitable, but may

support combustion.

Advice for firefighters:

Firefighting instructions: Use extinguishing media appropriate for the surrounding materials.

Protection during firefighting:

Wear appropriate protective equipment and self-contained breathing apparatus

(SCBA) with a full face-piece operated in positive pressure mode.

Other information: Do not allow run-off from fire-fighting to enter drains or water courses.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Use protective equipment to prevent contact with skin and eyes or inhalation of dust. Use site specific emergency procedures if product is released. Prevent entry to sewers and public surface waters per site specific containment procedures.

Methods and material for containment and cleaning up:

Use mechanical means. Store material in suitable containers for recycle or disposal. Minimize dust generation.

#### 7. HANDLING AND STORAGE

Precaution for safe handling: Avoid contact with skin and eyes. After handling, wash hands thoroughly with soap

and water. Avoid generating and breathing dust. Wash before eating and drinking.

<u>Safe Storage conditions</u>: Store in a dry, cool, and well-ventilated area. Protect from weather.

<u>Incompatible materials</u>: Strong alkaline or acid compounds.

#### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure limits are listed below, if they exist:

Component	Regulation	Type of listing	Value/Notation
Dust – inhalable particles	ACGIH	TWA	10 mg/ m <sup>3</sup>
Dust – respirable particles	ACGIH	TWA	3 mg/ m <sup>3</sup>

<u>Engineering controls</u>: Use adequate ventilation to prevent exposure.

Personal protective measures:

Hand protection: Wear suitable protective gloves to prevent direct exposure.

Eye protection: Safety glasses with side shields or tight fitting goggles.

Skin and body protection: Wear long sleeved clothing or other suitable clothing to prevent skin

exposure.

Respiratory protection: Where dust is generated and appropriate engineering controls cannot maintain

acceptable levels, use appropriate respiratory protection equipment to prevent

inhalation of materials.

Special requirements for PPE, protective clothing or respirators:

No specialty PPE requirements beyond those previously identified.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid	Vapor pressure:	NA
Color:	Pale tan	Vapor density:	NA
Odor:	odorless	Relative density	58-64 lbs/ft <sup>3</sup>
Odor threshold:	NA	Solubility:	Soluble in water
pH:	1.5-2.5 at 5% concentration	Partition coefficient:	NA
Melting point/freezing point:	NA	Auto ignition temp:	NA
Initial boiling point/range:	NA	Decomposition temp:	NA
Flashpoint:	NA	Viscosity:	NA
Evaporation rate:	NA		
Flammability (solid gas):	Non Flammable		
Upper/lower flammability or explosive limits:	NA		

Other information: No additional information.

10. STABILITY	AND RI	EACTIVITY			
Reactivity:	This product is stable under normal conditions of use, storage and transport.				
Chemical stability:	This produ	uct is stable at ambient temperatures and atmospheric pressures.			
Other:					
Hazardous reactions:	None dete	rmined.			
Conditions to avoid:	Avoid high	Avoid high temperatures. Prevent contact with moisture or incompatible materials.			
Incompatible materials:	Strong alk	aline or acid compounds.			
Hazardous decompositio  11. TOXICOLO		Metal and sulfur fumes when exce	essive heat is applied.		
Likely routes of exposure:		Inhalation, Ingestion, Skin contact, Eye contact			
Symptoms/injuries after inhalation:		High concentrations of dust may irritate the throat and respiratory system and cause coughing.			
Symptoms/injuries after Ingestion:		Harmful if swallowed.			
Symptoms/injuries after skin contact:		Causes mild skin irritation			
Symptoms/injuries after eye contact:		Causes eye irritation.			
Acute toxicity:		Mixture based on components' toxicity.			
Reproductive toxicity:		Suspected of damaging fertility or the unborn child.			
Specific Target Organ Toxicity-S E:		No relevant data found.			
Specific Target Organ Toxicity-R E:		May cause damage to organs through prolonged or repeated exposure.			
Carcinogenicity:		Not classified			
NTP (National Toxico)	ogy Prograr	n): Not classified			
IARC (International A	gency for Ro	desearch on Cancer): Not classified			
ACGIH (American Co Hygienists):	nference of	Governmental Industrial Not classified			

12. ECOLOGICAL INFORMATION		
Toxicity:	No testing data available.	
Persistence and degradability:	No data is available on the degradability of this product.	
Bioaccumulative potential:	No data is available.	
Mobility in soil:	No data is available.	
Other adverse effects:	No further relevant information available.	

13. DISPOSAL CONSIDERATIONS		
Waste treatment methods:	Recommend recycling excess product if at all possible. Avoid sewage and landfill disposal. Place contaminated material in suitable, labeled containers for disposal. See section 8 for exposure control information.	

14. TRANSPORT INFORMATION		
DOT:	Not regulated for transport	

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

#### 15. REGULATORY INFORMATION

**OSHA Hazard Communication Standard**: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard. 29 CFR 1910.1200.

Ingredients listed on TSCA inventory: Yes

CERCLA Section 103 Hazardous Substances: Manganese Compounds, Ferrous sulfate

EPCRA Section 311/312 Hazard Categories: None

EPCRA Section 313 Toxic Release Inventory: Manganese Compounds

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

This product not known to contain listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Micronutrient Approvals / Registrations: California Department of Food and Agriculture (CDFA):

Company Registration# 11871

## 16. OTHER INFORMATION

Date of preparation/issue date: June 19, 2017

Version: 1.0

Version: 2.0 (updated CAS#s) October 11, 2017

Disclaimer: The information in this Safety Data Sheet should be provided to all who will use, handle store, transport or otherwise be exposed to this product. All information concerning this product and/or all suggestions for handling and use contained herein are offered in good faith and are believed to be reliable as of the date of publication. SynaTek LP, however, makes no warranty as to the accuracy of and/or sufficiency of such information and/or suggestions, as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Buyer shall determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. The information contained herein supersedes all previously issued bulletins on the subject matter covered.