



SAFETY DATA SHEET

1. Product and Company Identification

Material name(s)	K-Nano, NPK-Nano, N-Nano, N-0-K, N-0-K +, N-0-K PROMAX, M-Nano
Version #	1.1
Issue date	7-20-2012
Revision date	8-25-2024
Supersedes date	07-20-2012
CAS #	Mixtures
Product use	Applied to Field Crops, Fruits, Greenhouse Plants, Indoor Grows, Hydroponic Plants, Trees, Shrubs, Grass .
Manufacturer/Supplier	AMP Surfactants Inc. 618 Washburn Road Melbourne, FL 32935 ampsurfactants@gmail.com Contact Person: Jim Shellenback
Telephone number	321-557-6219
Emergency	Emergency Telephone Number 321-557-6219

2. Hazards Identification

Physical state	Liquid.
Appearance	Slightly viscous, amber-colored liquid.
Emergency overview	Health injuries are not known or expected under normal use.
OSHA regulatory status	These products are not hazardous according to OSHA 29CFR 1910.1200.
Potential health effects	
Routes of exposure	Eye contact. Inhalation.
Eyes	May cause eye irritation on direct contact.
Skin	Prolonged skin contact may cause irritation.
Inhalation	Inhalation of high concentrations may result in transient irritation and coughing.
Ingestion	Ingestion may cause irritation and malaise.
Target organs	Eyes. Skin. Respiratory system.
Chronic effects	Prolonged contact may cause dryness of the skin.
Signs and symptoms	Irritant effects. Irritation of eyes and mucous membranes.
Potential environmental effects	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

Composition comments Product Ingredients: Food grade non-ionic surfactants, organic alcohol, horticultural oils, fatty acids, amino acids, inert ingredients, micronutrient, macronutrient.

4. First Aid Measures

First aid procedures	
Eye contact	Flush thoroughly with water. If irritation occurs, get medical assistance.
Skin contact	Wash with soap and water. Get medical attention if irritation develops and persists.
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Ingestion	Not expected to be harmful in amounts likely to be ingested by accident.
Notes to physician	Treat symptomatically.
General advice	Get medical attention if any discomfort develops.

K-Nano, NPK-Nano, N-Nano, N-0-K, N-0-K +, N-0-K PROMAX, M-Nano CPH SDS NA
909654 Version #: 01 Revision date: 08-06-2023 Issue date: 07-20-2012

5. Fire Fighting Measures

Flammable properties	The product is non-combustible.
Extinguishing media	
Suitable extinguishing media	Dry chemical, foam, carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters

Specific hazards arising from the chemical

Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterized.

Protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Move containers from fire area if you can do it without risk. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

6. Accidental Release Measures

Personal precautions	Ensure adequate ventilation. For personal protection, see section 8 of the SDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up Large Spills:	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.
Small Spills:	Absorb spillage with non-combustible, absorbent material. Wash area with soap and water.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	Avoid contact with eyes and prolonged skin contact. Observe good industrial hygiene practices.
Storage	Store in a cool and well-ventilated place. Store away from incompatible materials.

8. Exposure Controls / Personal Protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Engineering controls	Provide adequate ventilation and minimize the risk of inhalation of vapors and mists.
Personal protective equipment	
Eye / face protection	If risk of splashing, wear safety goggles or face shield.
Skin protection	Wear protective gloves. Rubber, neoprene or PVC gloves are recommended. Suitable gloves can be recommended by the glove supplier. Wear suitable protective clothing.
Respiratory protection	No personal respiratory protective equipment normally required. Seek advice from local supervisor.
General hygiene considerations	Wash hands after handling. Handle in accordance with good industrial hygiene and safety practice. Follow up on any medical surveillance requirements.

9. Physical & Chemical Properties

Appearance	Slightly viscous, amber colored liquid.
Physical state	Liquid.
Form	Slightly viscous.
Color	amber.
Odor	Faint.
Odor threshold	Not available.
pH	9.7
Vapor pressure	Not available.
Vapor density	Not available.
Boiling point	214.4 °F (101.3 °C)
Melting point/Freezing point	Not available.
Solubility (water)	Complete.
Specific gravity	Not available.
Flash point	> 200 °F (> 93.3 °C)
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
VOC	172 g/l
Bulk density	Not applicable.
Other data	
Explosive properties	Not explosive.
Flash point class	Combustible III B
Oxidizing properties	Not oxidizing.

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	High temperatures. Exposure to light. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Nitrogen oxides.
Possibility of hazardous reactions	Hazardous reactions do not occur.

11. Toxicological Information

Sensitization	No test data available for the product.
Acute effects	May form vapors or oil mists during mechanical action or at elevated temperatures which may be irritating to respiratory tract.
Local effects	Contact with eyes may cause irritation.
Chronic effects	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Carcinogenicity	Not classified by IARC, ACGIH, NTP or OSHA.
Epidemiology	No epidemiological data is available for this product.
Mutagenicity	There is no data to indicate that any component present at greater than 0.1% may present a risk.
Reproductive effects	Contains no ingredient listed as toxic to reproduction
Further information	No other specific acute or chronic health impact noted.

12. Ecological Information

Ecotoxicity	Oil spills are generally hazardous to the environment.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Aquatic toxicity	Not expected to be harmful to aquatic organisms.
Persistence and degradability	The product is readily biodegradable.
Bioaccumulation / Accumulation	Not available.
Mobility in environmental media	The product is miscible with water. May spread in water systems.

13. Disposal Considerations

Waste codes	Not regulated.
Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Follow all applicable MARPOL requirements for disposal of waste, when transporting materials by vessel.

14. Transport Information

DOT	Not regulated as a hazardous material by DOT.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
TDG	Not regulated as dangerous goods.
GHS:	HS1302.19.0100

15. Regulatory Information

US Federal Regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
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TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

None

Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories

Immediate Hazard -	No
Delayed Hazard -	No
Fire Hazard -	No
Pressure Hazard -	No
Reactivity Hazard -	No

Section 302 extremely hazardous substance (40CFR 355, Appendix A)

No

Section 311/312 (40 CFR 370)

No

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)

Not controlled

Canadian regulations

This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

K-Nano, NPK-Nano, N-Nano, N-0-K, N-0-K +, N-0-K PROMAX, M-Nano CPH SDS NA

909654 Version #: 01

Revision date: 08-06-2023

Issue date: 07-20-2012

WHMIS status Non-controlled
Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
Not listed.

US. Massachusetts RTK - Substance List
Not regulated.

US. New Jersey Worker and Community Right-to-Know Act
Not regulated.

US. Pennsylvania RTK - Hazardous Substances
Not regulated.

Mexico regulations This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

16. Other Information

Other information **ACGIH:** American Conference of Industrial Hygienists.
IARC: International Agency for Research on Cancer.
NTP: National Toxicology Program.
OSHA: Occupational Safety and Health Administration.
WHMIS: Workplace Hazardous Materials Information System.
GHS: Global Harmonizing System

HMIS® ratings	NFPA ratings	GHS ratings
Health: 0	Health: 0	Health: 5
Flammability: 0	Flammability: 0	Flammability: 5
Physical hazard: 0	Instability: 0	Physical hazard: 5

Note: Under the new GHS rating system, the number 5 represents "Minimal Hazard" (see below)



Disclaimer: The information in the sheet was written based on the best knowledge and experience currently available.

Safety Data Sheet

According to 1907/2006/EC, article 31 (REACH), according to Directive 67/548/EEC (DSD)
and according to 1272/2008/EC (CLP)

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product Name: RAW Nitrogen
Product Type: Nutrient
Chemical Name: Ammonium Sulfate
Formula: Proprietary
Supplier: NPK Industries
1600 Sky Park Dr. Suite #212
Medford, OR 97504

Emergency Telephone: +1.541.973.2244 (office hours only)

2 HAZARDS IDENTIFICATION

RAW Nitrogen is a non hazardous soluble nutrient

CLASSIFICATION

3105.20.0000

3 COMPOSITION/INFORMATION ON INGREDIENTS

Contains: Ammonium Sulfate (Soluble Granular / Crystals)

DISCLAIMER

The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as the suitability of such information for his own particular use.

4 FIRST AID MEASURES

Emergency and First Aid Procedure:

Inhalation:	None
Skin:	In case of eye or skin contact, flush with water, wash with soap and water. If irritation persists, contact physician.
Eyes:	In case of eye or skin contact, flush with water. If irritation persists, contact physician.
Ingestion:	Contact poison control center or doctor.

5 FIRE FIGHTING MEASURES

Flash Point, °F:	N/A
Auto Ignition Temperature, °F:	N/A
Flammable limits in air, % by volume:	N/A

Fire Extinguishing materials

N-P-K fertilizer solutions are non-flammable. If involved in a fire, use:	N/A
Special fire fighting procedure:	None
Unusual fire and explosion hazards:	None

6 ACCIDENTAL RELEASE MEASURES

Precautions if Material is Spilled or Released:	Sweep into containers
Waste Disposal Methods:	Dispose according to federal, state and local regulations

7 HANDLING AND STORE

Storage and Handling:	Store in tightly sealed containers in cool dry area, away from heat, flame and sunlight
Special Precautions:	None Required

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation and engineering controls:	N/A
Respiratory protection:	Face mask suggested
Eye protection:	Goggles or safety glasses recommended
Gloves:	N/A
Other clothing and equipment:	N/A

Precautionary statements:

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Other handling and storage requirements: N/A
Protective measures during maintenance of contaminated equipment: N/A

9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point (closed cup method): N/A
Specific Gravity: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Boiling Point/Melting Point: N/A
Solubility in Water: 100%
Appearance: White Small Granular / Crystals

10 STABILITY AND REACTIVITY

Stability: Stable
Hazardous Polymerization: Will not occur
Materials to Avoid: N/A
Conditions to Avoid: N/A
Hazardous Decomposition Products: N/A

11 TOXICOLOGICAL INFORMATION

SYMPTOMS OF OVEREXPOSURE:

Inhaled: None
Contact with skin or eyes: Wash with water
Absorbed through skin: N/A
Swallowed: Contact poison control center

HEALTH EFFECTS OR RISKS FROM EXPOSURE:

Acute: None
Chronic: None
Reproductive: None

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

POTENTIAL OR SUSPECTED CANCER AGENT No

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12 ECOLOGICAL INFORMATION

Occupational Exposure Limit:	N/A
Threshold Limit Value:	Not established
OSHA Permissible Exposure Limit:	Not established

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of all wastes in accordance with Federal, State and Local regulations.

14 TRANSPORT INFORMATION

SCHEDULE B/HTC #: 3105.20.0000

Non Hazardous

15 REGULATORY INFORMATION

CONTAINS:	Ammonium Sulfate	
SAFETY PHRASES:	S1/2	Keep out of the reach of children
	S17	Keep away from combustible material
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
	S28	After contact with skin, wash immediately with plenty of water
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
	S45	In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

16 OTHER INFORMATION

REVISION DATE: 6/24/2019

DISCLAIMER

The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as the suitability of such information for his own particular use.

Safety Data Sheet

According to 1907/2006/EC, article 31 (REACH), according to Directive 67/548/EEC (DSD)
and according to 1272/2008/EC (CLP)

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product Name: RAW Phosphorus
Product Type: Nutrient
Chemical Name: Mono Ammonium Phosphate
Formula: Proprietary
Supplier: NPK Industries
1600 Sky Park Dr. Suite #212
Medford, OR 97504

Emergency Telephone: +1.541.973.2244 (office hours only)

2 HAZARDS IDENTIFICATION

RAW Phosphorus is a non hazardous soluble nutrient

CLASSIFICATION

3105.20.0000

3 COMPOSITION/INFORMATION ON INGREDIENTS

Contains: Mono Ammonium Phosphate (Soluble Granular / Crystals)

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4 FIRST AID MEASURES

Emergency and First Aid Procedure:

Inhalation:	None
Skin:	In case of eye or skin contact, flush with water, wash with soap and water. If irritation persists, contact physician.
Eyes:	In case of eye or skin contact, flush with water. If irritation persists, contact physician.
Ingestion:	Contact poison control center or doctor.

5 FIRE FIGHTING MEASURES

Flash Point, °F:	N/A
Auto Ignition Temperature, °F:	N/A
Flammable limits in air, % by volume:	N/A

Fire Extinguishing materials

N-P-K fertilizer solutions are non-flammable. If involved in a fire, use:	N/A
Special fire fighting procedure:	None
Unusual fire and explosion hazards:	None

6 ACCIDENTAL RELEASE MEASURES

Precautions if Material is Spilled or Released:	Sweep into containers
Waste Disposal Methods:	Dispose according to federal, state and local regulations

7 HANDLING AND STORE

Storage and Handling:	Store in tightly sealed containers in cool dry area, away from heat, flame and sunlight
Special Precautions:	None Required

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation and engineering controls:	N/A
Respiratory protection:	Face mask suggested
Eye protection:	Goggles or safety glasses recommended
Gloves:	N/A
Other clothing and equipment:	N/A

Precautionary statements:

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Other handling and storage requirements: N/A
Protective measures during maintenance of contaminated equipment: N/A

9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point (closed cup method): N/A
Specific Gravity: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Boiling Point/Melting Point: N/A
Solubility in Water: 100%
Appearance: White Small Granular / Crystals

10 STABILITY AND REACTIVITY

Stability: Stable
Hazardous Polymerization: Will not occur
Materials to Avoid: N/A
Conditions to Avoid: N/A
Hazardous Decomposition Products: N/A

11 TOXICOLOGICAL INFORMATION

SYMPTOMS OF OVEREXPOSURE:

Inhaled: None
Contact with skin or eyes: Wash with water
Absorbed through skin: N/A
Swallowed: Contact poison control center

HEALTH EFFECTS OR RISKS FROM EXPOSURE:

Acute: None
Chronic: None
Reproductive: None

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

POTENTIAL OR SUSPECTED CANCER AGENT No

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12 ECOLOGICAL INFORMATION

Occupational Exposure Limit:	N/A
Threshold Limit Value:	Not established
OSHA Permissible Exposure Limit:	Not established

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of all wastes in accordance with Federal, State and Local regulations.

14 TRANSPORT INFORMATION

SCHEDULE B/HTC #: 3105.20.0000

Non Hazardous

15 REGULATORY INFORMATION

CONTAINS:	Mono Ammonium Phosphate
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SAFETY PHRASES:	S1/2	Keep out of the reach of children
	S17	Keep away from combustible material
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
	S28	After contact with skin, wash immediately with plenty of water
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
S45	In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)	

16 OTHER INFORMATION

REVISION DATE:	6/24/2019
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DISCLAIMER

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Safety Data Sheet

According to 1907/2006/EC, article 31 (REACH), according to Directive 67/548/EEC (DSD)
and according to 1272/2008/EC (CLP)

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product Name: RAW Potassium
Product Type: Nutrient
Chemical Name: Sulfate of Potash
Formula: Proprietary
Supplier: NPK Industries
1600 Sky Park Dr. Suite #212
Medford, OR 97504

Emergency Telephone: +1.541.973.2244 (office hours only)

2 HAZARDS IDENTIFICATION

RAW Potassium is a non hazardous soluble nutrient

CLASSIFICATION

3105.20.0000

3 COMPOSITION/INFORMATION ON INGREDIENTS

Contains: Sulfate of Potash (Soluble / Crystals)

DISCLAIMER

The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as the suitability of such information for his own particular use.

4 FIRST AID MEASURES

Emergency and First Aid Procedure:

Inhalation:	Supply fresh air; consult doctor
Skin:	In case of eye or skin contact, flush with water, wash with soap and water. If irritation persists, contact physician.
Eyes:	In case of eye or skin contact, flush with water. If irritation persists, contact physician.
Ingestion:	Flush with water. If irritation persists, contact physician.

5 FIRE FIGHTING MEASURES

Flash Point, °F:	N/A
Auto Ignition Temperature, °F:	N/A
Flammable limits in air, % by volume:	N/A

Fire Extinguishing materials

N-P-K fertilizer solutions are non-flammable. If involved in a fire, use:	N/A
Special fire fighting procedure:	None
Unusual fire and explosion hazards:	None

6 ACCIDENTAL RELEASE MEASURES

Precautions if Material is Spilled or Released:	Sweep into containers
Waste Disposal Methods:	Dispose according to federal, state and local regulations

7 HANDLING AND STORE

Storage and Handling:	Store in tightly sealed containers in cool dry area, away from heat, flame and sunlight
Special Precautions:	None Required

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation and engineering controls:	N/A
Respiratory protection:	Face mask suggested
Eye protection:	Goggles or safety glasses recommended
Gloves:	N/A
Other clothing and equipment:	N/A

Precautionary statements:

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Other handling and storage requirements: N/A
Protective measures during maintenance of contaminated equipment: N/A

9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point (closed cup method): N/A
Specific Gravity: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Boiling Point: N/A
Melting Point: N/A
Solubility in Water: 100%
Appearance: White / Cream Crystals

10 STABILITY AND REACTIVITY

Stability: Stable
Hazardous Polymerization: Will not occur
Materials to Avoid: N/A
Conditions to Avoid: N/A
Hazardous Decomposition Products: N/A

11 TOXICOLOGICAL INFORMATION

SYMPTOMS OF OVEREXPOSURE:

Inhaled: None
Contact with skin or eyes: Wash with water
Absorbed through skin: N/A
Swallowed: Flush with Water

HEALTH EFFECTS OR RISKS FROM EXPOSURE:

Acute: None
Chronic: None
Reproductive: None

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

POTENTIAL OR SUSPECTED CANCER AGENT No

DISCLAIMER

The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as the suitability of such information for his own particular use.

12 ECOLOGICAL INFORMATION

Occupational Exposure Limit: N/A
Threshold Limit Value: Not established
OSHA Permissible Exposure Limit: Not established

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of all wastes in accordance with Federal, State and Local regulations.

14 TRANSPORT INFORMATION

SCHEDULE B/HTC #: 3105.20.0000

Non Hazardous

15 REGULATORY INFORMATION

CONTAINS: Sulfate of Potash

SAFETY PHRASES:	S1/2	Keep out of the reach of children
	S17	Keep away from combustible material
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
	S28	After contact with skin, wash immediately with plenty of water
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
S45	In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)	

16 OTHER INFORMATION

REVISION DATE: 6/25/2019

DISCLAIMER

The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as the suitability of such information for his own particular use.

Micro Mix Chelated**Safety Data Sheet 00113**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 07/10/2019

SECTION 1: Identification**1.1. Identification**

Product form : Mixture
 Product name : Micro Mix Chelated
 Product code : 00113

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

LESCO, Inc.
 1385 East 36th St.
 Cleveland, OH 44114-4114
 T 1-800-347-4742

1.4. Emergency telephone number

Emergency number : 1-800-424-9300
 ChemTrec

SECTION 2: Hazard(s) identification**2.1. Classification of the substance or mixture****GHS-US classification**

Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2B	H320	Causes eye irritation
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401	Toxic to aquatic life

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements**GHS US labelling**

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Warning

Hazard statements (GHS US) :

H315 - Causes skin irritation.
 H320 - Causes eye irritation
 H401 - Toxic to aquatic life

Precautionary statements (GHS US) :

P264 - Wash hands, forearms and face thoroughly after handling.
 P273 - Avoid release to the environment.
 P280 - Wear protective clothing, eye protection, face protection.
 P302+P352 - If on skin: Wash with plenty of water/...
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P321 - Specific treatment (see supplemental first aid instruction on this label)
 P332+P313 - If skin irritation occurs: Get medical advice/attention.
 P337+P313 - If eye irritation persists: Get medical advice/attention.
 P362 - Take off contaminated clothing.
 P501 - Dispose of contents/container to Dispose of at a licensed hazardous waste facility in accordance with state and local regulations

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
iron(II) sulfate, heptahydrate	(CAS-No.) 7782-63-0	5 - 20	Acute Tox. 4 (Oral), H302

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

- Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
- Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed and in a well-ventilated area. Long-term storage at temperatures above 100 F (36 C) and long term storage of opened containers, can adversely impact the efficacy of products containing N-(n-butyl)-thiophosphoric triamide. Store in accordance with all applicable local, state, and national regulations.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 25 (5 - 42) °C >=77 F (40-107 F) DO NOT FREEZE

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

iron(II) sulfate, heptahydrate (7782-63-0)

ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ (Iron salts, soluble, as Fe; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
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8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : brown

Odour : Characteristic odour

Odour threshold : No data available

pH : <= 3

Melting point : No data available

Freezing point : <= 0 °C

Boiling point : >= 100 °C

Flash point : None

Relative evaporation rate (butylacetate=1) : No data available

Flammability (solid, gas) : Non flammable.

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

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Relative density	: No data available
Density	: >= 1.175 g/ml
Solubility	: Soluble in water.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

VOC content : <= 10 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

iron(II) sulfate, heptahydrate (7782-63-0)

LD50 oral rat	1480 mg/kg (Rat)
ATE US (oral)	1480 mg/kg bodyweight

Skin corrosion/irritation	: Causes skin irritation. pH: <= 3
Serious eye damage/irritation	: Causes eye irritation. pH: <= 3
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

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Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Toxic to aquatic life.

iron(II) sulfate, heptahydrate (7782-63-0)

LC50 fish 1	925 mg/l (LC50; 96 h; Poecilia reticulata)
EC50 Daphnia 2	152 mg/l (EC50; 48 h)

12.2. Persistence and degradability

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Persistence and degradability : Not established.

iron(II) sulfate, heptahydrate (7782-63-0)

Persistence and degradability : Biodegradability in water: no data available. Biodegradability in soil: no data available. Adsorbs into the soil.

12.3. Bioaccumulative potential

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Bioaccumulative potential : Not established.

iron(II) sulfate, heptahydrate (7782-63-0)

Bioaccumulative potential : Not bioaccumulative.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to a licensed hazardous waste facility in accordance with state and local agencies.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

iron(II) sulfate, heptahydrate (7782-63-0)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory
Not subject to reporting requirements of the United States SARA Section 313

CERCLA RQ : 1000 lb

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15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Component	State or local regulations
iron(II) sulfate, heptahydrate(7782-63-0)	U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 07/10/2019

Other information : LESCO urges each customer or recipient of this Safety Data Sheet (SDS) to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and is based on our current knowledge. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. It is the buyer's/user's responsibility to ensure that his or her activities comply with all federal, state, provincial and local laws. The information presented here pertains only to the product as shipped. It is the buyer's/user's duty to determine the conditions necessary for safe use of this product.
The SDS serves different purposes than, and DOES NOT REPLACE OR MODIFY, THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling.
It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

Full text of H-statements:

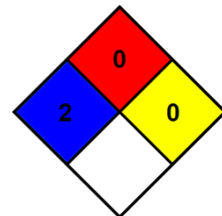
H302	Harmful if swallowed.
H315	Causes skin irritation.
H320	Causes eye irritation
H401	Toxic to aquatic life

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.

NFPA specific hazard : None



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Hazard Rating

- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 0 Minimal Hazard - Materials that will not burn
- Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
- Personal protection : C
C - Safety glasses, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.