The Andersons



Safety Data Sheet

Section 1: Identification

Product Identifier: Foltec Minors

Product Name: Foltec Minors

Product Code: APTMICRO2X25.2

Relevant identified uses of the substance or mixture and uses advised

Recommended use: To prevent and correct micronutrient deficiencies when used as directed. Refer to the label.

Details of the supplier of the safety data sheet

Manufacturer: KeyPlex Manufacturing

Address: 2239 Commerce Ct., Bowling Green, Fl .33834

Telephone (General) (407)682-6500

Emergency telephone number: ChemTrac 1-800-424-9300

Section 2: Hazard Identification

United States (US)
According to OSHA 29 CFR 1910.1200 HCS

Classification of the substances or mixture OSHA HCS 2012





Hazard statements

Foltec Minors is a low pH (acidic) water soluble liquid. Foltec Minors can corrode metals after prolonged exposure, always use acid resistant, corrosion resistant equipment when using or handling Foltec Minors.

Precautionary statements

For use in Agricultural production, to alleviate micronutrient deficiencies. Use as Directed on the label. Follow all local and federal regulations regarding agrochemical use. Keep out of reach of children.
Prevention: Keep out of reach of children.
Response
Storage/Disposal: Store in a well-ventilated and secure storage facility. Ventilation system should be corrosive resistant. The product should be stored at ambient temperature. The product should not be stored at temperatures below 5 degrees centigrade or above 50 degrees centigrade. Keep out of direct sunlight.
Other hazards OSHA HCS 2012
Canada According to WHMIS
Classification of the substance or mixture WHMIS
Label elements WHMIS
Other hazards WHMIS
Other Information
Other Information

Substances

• Material does not meet the criteria of a substance.

Mixtures

Ingredient Infomation					
Chemical Name	CASS Number	% (weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Magnesium Sulfate Heptahydrate	10034-99-8	15.45%	N/A		
Manganese Sulfate Monohydrate	10034-96-5	2.35%	N/A		
Iron Sulfate Heptahydrate	7782-63-0	17.5%			
Zinc Sulfate Monohydrate	7446-19-7	2.10%	N/A		
Sodium Molybdate Dihydrate	10102-40-6	0.0125%	N/A		
Disodium Octaborate Tetrahydrate	12280-03-4	0.80%	N/A		
Sodium Glucoheptonate	31138-65-5	0-48%	N/A		
Humic Acid	308066-67-3	0.825%	N/A		
Fulvic Acid	308066-67-3	0.275%	N/A		
Yeast Extract (Containing Alpha-Keto Acids)	Mixture	0.063%	N/A		

Section 4: First-Aid Measures

Description of first aid measures

Inhalation: Move victim to fresh air. If person is NOT Breathing Call Emergency Services, perform artificial respiration if necessary. Call Physician if symptoms persist.

Skin: remove all contaminated clothing. Wash skin with soap and clean water thoroughly for at least 20 minutes. Seek Medical attention if irritation develops and persists.

Eye: Flush eyes with clean running water for a minimum of 15-20 minutes. Make Certain the water rinses the eye by periodically lifting the lower and upper lids for thorough rinsing. Get medical attention if irritation persists.

Ingestion: Call a physician. Have person sip a glass of clean water to rinse mouth and spit. Do Not Induce Vomiting unless instructed by a physician. Contact physician if person is unconscious do not give anything my mouth.

Most important symptoms and effects. Both acute and delayed

Upset Stomach, Vomiting.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Section 5: Fire-Fighting Measures

Extinguishing media
Suitable Extinguishing Media - Water

Unsuitable Extinguishing Media - N/A

Flash Point: Not Applicable Method Used: Not Applicable

Upper Flammable Limit: Not Applicable

Auto Ignition: Not Available

Special hazards arising from the substance or mixture

Unusual fire and Exploitation - N/A

Hazards - N/A

Hazardous Combustion Products – If this product is heated to an anhydrous state it will omit Sulfur Dioxide vapors which is hazardous if inhaled. Exposure to high heat can emit toxic vapors.

Advice for firefighters

Foltec Minors is not a flammable liquid and is very water-soluble. In case of fire, use sufficient water to dilute the product to avoid production of sulfur dioxide.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Always wear acid resistant protective clothing when handling this product, Always wear Gloves and Eye Protection, Handle in well ventilated are. Wear respiratory equipment.

Emergency Procedures

Environmental precautions

Take all spill control measures necessary to avoid contamination of ground water and storm run off drains.

Methods and material for containment and cleaning up

Wear acid resistant, protective clothing, respiratory equipment and eye protection. Isolate the spill area and restrict access to non-essential personnel. Stop the flow of the material at the source.

Spill on Non-Absorbent Surfaces; use Dry absorbent material such as Towels or Diatomaceous Earth. Use sufficient quantity to fully contain and absorb the spilt liquid. Collect the contaminated material and place in a secure ventilated vessel. Dispose of in compliance to local laws and regulations. **Spill on Soil**; remove the contaminated soil to a depth where no residue is present, place contaminated soil in a secure ventilated vessel and dispose of in compliance to local laws and regulations.

Section 7: Handling and Storage

Precautions for safe handling

Always wear acid resistant protective clothing, gloves and eye protection before you handle the material.

Conditions for safe storage, including any incompatibilities

Store in a well ventilated and secure storage facility. Ventilation system should be corrosive resistant. The product should be stored at ambient temperature. The product should not be stored at temperatures below 5 degrees centigrade or above 50 degrees centigrade. Keep out of direct sunlight.

Incompatible Materials or Ignition Sources

The product should not come into contact with Methomyl (S-methyl-N-[(methycarbamoyl)oxy] thioacetimidate. Will cause evolution of Hydrogen Sulfide.

Section 8: Exposure Controls / Personal Protection

Control parameters

Exposure Limits / Guidelines							
	Result	ACGIH	Canada Ontario	Canada Quebec	China	NIOSH	
Exposure Limits/Guidelines (Con't.)							
			Result	OSHA			

Exposure Controls

Engineering: Use Corrosion Resistant Ventilation System in Storage facility, and equipment used in handling this product.

Measures/Controls **Personal Protective Equipment**

Pictograms









Respiratory

Handle this product wearing a facemask or in a well ventilated area.

Eye/Face

Handle this product wearing eye protection glasses, goggles or a face shield.

Hands

When handling this product wear appropriate work gloves.

Skin/Body

When handle this product wear long sleeve shirt and pants.

General Industrial Hygiene

When handling chemicals, follow all local and federal regulations.

Considerations

Environmental Exposure Controls

Key to abbreviations

NIOSH= National Institute of Occupational Safety and Health OSHA= Occupational Safety and Health Administration MSHA= Mine Safety and Health Administration

ACGIH= American Conference of Governmental Industrial Hygiene TWA= Time-Weighted Averages are based on 8d/day exposures STEL= Short Term Exposure Limits are based on 15-minute exposures STEV = Short Term Exposure Value

Section 9: Physical and Chemical Properties

Information on Physical and Chemical Properties

	Material	Description	
Physical Form	Liquid	Appearance/Description	Dark Opaque with sweet smell
Color	Dark Oapque		
Taste	N/A		
Particular Size			
Odor Threshold	Data lacking	Physical and Chemical Properties	Data lacking
	Genera	Properties	
Boiling Point	100 degrees centigrade	Melting Point	N/A

Decomposition Temperature	N/A	Heat of Decomposition	N/A
pH	4.8-5.2	Specific Gravity/Relative Density	1.34
Density	11.2 lbs/gal	Bulk Density	
Water Solubility	Soluble	Solvent Solubility	
Viscosity		Explosive Properties	Classification criteria not met
Oxidizing Properties:			
		Volatility	
Vapor Pressure	N/A	Vapor Density	N/A
Evaporation Rate	N/A		
VOC (Vol.)	N/A	Volatiles (Wt.)	N/A
Volatiles (Vol.)	N/A		
	1	Flammability	
Flash Point	N/A	UEL	N/A
LEL	N/A	Autoignition	N/A
Self-Accelerating Decomposition Temperature (SADT)	N/A	Heat of Combustion	N/A
Burning Time	N/A	Flame Duration	N/A
Flame Height	N/A	Flame Extension	N/A
Ignition Distance	N/A	Flammability (solid,gas)	N/A
	I	Environmental	
Half-Life	N/A	Octano/Water Partition Coefficient	N/A
Coefficient of water/oil distribution	N/A	Bioaccumulation Factor	N/A
Bioconcentration Factor		Biochemical Oxygen Demand BOD/BOD5	
Chemical Oxygen Demand		Persistence	
Degradation			

Section 10: Stability and Reactivity

Reactivity: Yes

Chemical Stability: Under normal temperatures and atmospheric pressure this product is stable.

Possibility of hazardous reactions: Yes

Conditions to avoid: Avoid mixing with Methomyl (S-methyl-N-[(methycarbamoyl)oxy] thioacetimidate

Incompatible materials: Avoid mixing with Methomyl (S-methyl-N-[(methycarbamoyl)oxy] thioacetimidate

Hazardous decomposition products: Sulphur Dioxide (SO2) Vapors

Section 11: Toxicological Information

Information on toxicological effects

Component Name	CAS		Data
Foltec Minors	Mixture	Acute Toxicity Oral (ATE): Category III Irritation: Dermal (ATE): Category IV Eye (ATE): Category III Reproductive: N/A	
GHS Properties			OSHA HCS 2012 • Classification criteria not met
Acute toxicity			
Aspiration Hazard			
Carcinogenicity			
Germ Cell Mutagenicity			
Respiratory sensitization			
Serious eye damage/Irritation			
Skin corrosion/Irritation			
Skin sensitization			
STOT-RE			
STOT-SE			
Toxicity for Reproduction			

Target Organs

Route(s) of entry/exposure

Skin: Wear acid resistant work gloves and clothing. Avoid Skin Contact

Eyes: Wear goggles or glasses with side shields, if not available wear face shield. Avoid splashes.

Oral: Do not swallow or taste.

Acute (immediate) Possible redness and localized irritation Chronic (Delayed) N/A Eye Acute (Immediate) Burning Sensation, Redness Chronic (Delayed) N/A Ingestion Acute (Immediate) Nausea, Vomiting Chronic (Delayed) N/A

Section 12: Ecological Information

Toxicity: Not toxic to Bees

Persistence and degradability

Bioaccumulative potential: None

Mobility in Soil: Mobile in Soil

Other adverse effects

Other Information

Section 13: Disposal Considerations

Waste treatment methods

Product waste: Dispose of following Local and Federal Laws

Packaging waste: Rinse with water, Recycle if possible. Follow local and Federal Laws and regulations.

Section 14: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA Hazard Classifications • Acute, Fire

State Right To Know						
Component	CAS	MA	NJ	PA		

Inventory					
Component	CAS	Canada DSL	Canada NDSL	TSCA	
Napththa (petroleum), Hydrotreated light					
Isopropyl alcohol					

Section 15: Other Information

Last Revision Date:

Preparation Date: June 23, 2015

Disclaimer/Statement of

Liability

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with the directions under normal conditions of use, but neither this warranty nor any other warranty of merchantability of fitness of a particular product expressed or implied extends to the use of this product contrary to label instructions or under abnormal conditions not reasonably foreseeable by the seller, and buyer assumes the risk of any such use.