Schultz® Liquid Plant Food – All Analyses

Safety Data Sheet

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

Revision Date: 11/12/2014 Date of issue: 07/31/2015

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE

1.1. Product Identifier

Product Form: Mixture

Product Name: Schultz Liquid Plant Food -- All Analyses

1.2. Intended Use of the Product

Use of the substance/mixture: Fertilizer

1.3. Details of the Supplier of the Safety Data Sheet

Knox Fertilizer Company, Inc.
P.O. Box 248
Knox, IN 46534
TEL: 574-772-6275

1.4. Emergency Telephone Number

Emergency Number: CHEMTREC 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Acute Tox. 4 (Oral)	H302
Skin Irrit. 2	H315
Eye Irrit. 2B	H320
STOT SE 3	H335
Aquatic Acute 2	H401
Aquatic Chronic 3	H412

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US):

GHS07

Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H302 - Harmful if swallowed
H315 - Causes skin irritation
H320 - Causes serious eye irritation
H335 - May cause respiratory irritation
H401 - Toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements (GHS-US) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area
P272 - Contaminated work clothing should not be allowed out of the workplace
P273 - Avoid release to the environment
P280 – Wear eye protection, protective gloves, protective clothing
P302+P352 - IF ON SKIN: Wash with plenty of water
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a poison center/doctor if you feel unwell
P321 - Specific treatment (see Section 4 on this label)
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P362+P364 - Take off contaminated clothing and wash it before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container according to local, regional, national, and international regulations

2.3. Other Hazards

Other Hazards: No additional information available

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture (Exact percentages of ingredients are being withheld as a trade secret)

Name	Product identifier	%	Classification (GHS-US)
Urea	(CAS No) 57-13-6	0.0 - 100	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
Potassium Nitrate	(CAS No) 7757-79-1	0.0 - 100	Eye Irrit. 2B, H320
Monopotassium Phosphate	(CAS No) 7778-77-0	0.0 - 100	Not classified
Monoammonium Phosphate	(CAS No) 7722-76-1	0.0 - 100	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Potassium Tripolyphosphate (KTPP)	(CAS No)	0.0 - 100	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Iron (III) EDTA	(CAS No) 15708-41-5	0.0 - 5	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Manganese EDTA	(CAS No) 15375-84-5	0.0 - 5	Eye Irrit. 2B, H320
Zinc EDTA	(CAS No) 14025-21-9	0.0 - 5	Not Classified

Full text of H-phrases: see section 1

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: If medical advice is needed, have product container or label at hand.
First-aid Measures After Inhalation: If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Wash skin thoroughly with mild soap and water. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.
First-aid Measures After Eye Contact: Immediately rinse with water for a prolonged period (at least 15 minutes) while holding the eyelids wide open. Obtain medical attention if irritation develops or persists.
First-aid Measures After Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

4.2 Most important symptoms and effects, both acute and delayed

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

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Not considered flammable but will burn at high temperatures. Use extinguishing media appropriate for surrounding fire.
Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Decomposes above 132 °C (270 °F). Under conditions of fire this material may produce: Ammonia. Nitrogen oxides. Biuret. Cyanuric acid.
Explosion Hazard: May form explosive compounds if mixed with: Calcium hypochlorite. Sodium hypochlorite. Nitrates. Nitric acid. Perchloric acid. Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.
Reactivity: This product as shipped in the form of coarse granules should not contain sufficient dust to present an explosion hazard. Prevent dust accumulation (to minimize explosion hazard).

5.3. Advice for Firefighters

Firefighting Instructions: Not flammable.
Protection During Firefighting: Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).
Other information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Handle in accordance with good industrial hygiene and safety practice. This material becomes slippery when wet.

6.1.1. For Non-emergency Personnel
Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection.
Emergency Procedures: Collect as any solid. Ventilate area. Evacuate unnecessary personnel.
6.1.2. For Emergency Responders
Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection.
Emergency Procedures: If possible, stop flow of product. Contain and collect as any solid. Ventilate area. Evacuate unnecessary personnel.

6.2. Environmental Precautions

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. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

6.4. Reference to Other Sections: No additional information available

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety procedures. Wear recommended personal protective equipment.
Hygiene Measures: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store tightly closed in a dry, cool and well-ventilated place. Protect from moisture.
Prohibitions on mixed storage: Store away from: Ammonium nitrate. Refer to Section 10 on Incompatible Materials.
Special Rules on Packaging: Corrosive to copper and its alloys.

7.3. Specific End Use(s)

Fertilizer.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

8.1. Control Parameters

No additional information available

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure all national/local regulations are observed.
Personal Protective Equipment: Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection. For particulates and dust: Safety glasses.

Hand Protection: Protective Gloves.
Eye Protection: Safety glasses.
Skin and Body Protection: Wear suitable protective clothing.
Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.
Environmental Exposure Controls: Ensure adequate ventilation, especially in confined areas.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State:	Liquid.
Color:	Light Blue.
Odor:	Characteristic
Odor Threshold	N/A
pH:	N/A
pH solution:	N/A
Relative Evaporation Rate (butylacetate=1):	N/A
Melting Point:	N/A
Freezing Point:	N/A

Boiling Point:	N/A
Flash Point:	N/A
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available
Flammability (solid, gas):	No data available
Vapor Pressure:	N/A
Relative Vapor Density at 20° C:	No data available
Relative Density:	No data available
Density:	No data available
Solubility: Water:	Readily soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	N/A

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: This product as shipped in the form of fine crystals/granules should not contain sufficient dust to present an explosion hazard. Prevent dust accumulation (to minimize explosion hazard).

10.2. Chemical Stability: Stable at standard temperature and pressure.

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Protect from moisture. Keep away from heat.

10.5. Incompatible Materials: May form explosive mixture if in contact with strong acid such as nitric or perchloric acids. Avoid contact with: Strong oxidizers. Strong acids, bases. Nitrates. Hypochlorites. Perchlorates. Chlorides. Corrosive to copper and its alloys.

10.6. Hazardous Decomposition Products: Under conditions of fire this material may produce: Nitrogen oxides. Ammonia. Biuret. Carbon oxides (CO, CO_2). Formaldehyde.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Monoammonium Phosphate (7722-76-1)	
LD_{50} Oral Rat	5750 mg/kg
LD_{50} Dermal Rabbit	>7940 mg/kg
ATE US (Oral)	5750.0000 mg/kg body weight
Monopotassium Phosphate (7778-77-0)	
LD_{50} Oral Rat	7100 mg/kg
LD_{50} Dermal Rabbit	>4640 mg/kg
ATE US (Oral)	7100.0000 mg/kg body weight
Potassium Nitrate (7757-79-1)	
LD_{50} Oral Rat	3750 mg/kg
LD_{50} Dermal Rat	>5000 mg/kg
ATE US (Oral)	3750.0000 mg/kg body weight
Urea (57-13-6)	
LD_{50} Oral Rat	8471 mgkg
LD_{50} Dermal Rat	>3200 mg/kg
LD_{50} Dermal Rabbit	>21000 mg/kg
ATE US (Oral)	8471.0000 mg/kg body weight

Iron (III) EDTA (15708-41-5)	
LD_{50} Oral Rat	5000 mg/kg
ATE (Oral)	5000.0000 mg/kg body weight

Ingestion: Harmful if swallowed.
Skin Corrosion/Irritation: Causes skin irritation.
Serious Eye Damage/Irritation: Causes eye irritation.
Skin Sensitization: Causes skin irritation.
Respiratory: May cause respiratory irritation.
Germ Cell Mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive Toxicity: Not classified.
Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Overexposure may be irritating to the respiratory system.
Symptoms/Injuries After Skin Contact: May cause skin irritation.
Symptoms/Injuries After Eye Contact: May cause eye irritation.
Symptoms/Injuries After Ingestion: If a large quantity has been ingested: Abdominal pain. Diarrhea. Nausea. Vomiting.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Monoammonium Phosphate (7722-76-1)	
LC_{50} Fish 1	155 ppm (Exposure time: 96 h - Species: *Pimephales promelas*)

Urea (57-13-6)	
LC_{50} Fish 1	>6810 mg/l (Exposure time: 96 h - Species: *Leuciscus idus*)
EC_{50} Daphnia 1	> 10000 mg/l (Exposure time: 48 h - Species: *Daphnia magna)*
LC_{50} Fish 2	17500 mg/l (Exposure time: 96 h - Species: *Poecilia reticulata)*
EC_{50} Daphnia 2	> 10000 mg/l (Exposure time: 24 h - Species: *Daphnia magna)*
Threshold limit other aquatics 1	120000 mg/l (Exposure time: 16 h - Species: *Bacteria;* Toxicity Test)
Threshold limit other aquatics 1	>10000 mg/l (Species: *Pseudomona putida*)
Threshold limit Algae 1	> 10000 mg/l (Exposure time: 168 h - Species: *S. quadricauda)*

Potassium Nitrate (7757-79-1)	
LC_{50} Fish 1	162 mg/l (Exposure time: 96 h - Species: *Pisces sp.*; Lethal)
EC_{50} Daphnia 1	39 mg/l (Exposure time: 96 h - Species: *Daphnia magna)*
LC_{50} Fish 2	1378 mg/l (Exposure time: 96 h - Species: *Poecilia reticulata)*
EC_{50} Daphnia 2	490 mg/l (Exposure time: 48 h - Species: *Daphnia magna)*
Threshold limit Fish 1	3000 mg/l (Exposure time: 96 h - Species: *Lepomis macrochirus*)
Threshold limit Fih 2	162 mg/l (Exposure time: 96 h - Species: *Gambusia affinis*)

Monopotassium Phosphate (7778-77-0)	
LC_{50} Fish 1	>900 mg/l (Exposure time: 48 h - Species: *Leuciscus idus*)
EC_{50} Other Aquatic Organisms 1	2 ppm (Exposure time: 672 h - Species: *Potamogeton sp.)*
Threshold Limit Algae 1	1 ppm (Exposure time: 672h - Species: *Elodea sp.*)

Iron (III) (15708-41-5)	
LC_{50} Fish 1	2592 mg/l (Exposure time: 96 h - Species: *Pisces*

12.2. Persistence and Degradability

Schultz Liquid Plant Food – All Analyses	
Persistence and Degradability	May cause long-term adverse effects in the environment. This product is water soluble and eventually biodegrades into elemental nitrogen. Excess nitrogen and nitrates in a body of water will contribute to eutrophication with visible effects such as toxic algae bloom.

12.3. Bioaccumulative Potential

Monoammonium Phosphate (7722-76-1)	
Bioaccumulative Potential	(no bioaccumulation expected)

Potassium Nitrate (7757-79-1)	
Bioaccumulative Potential	Not Established

Urea (57-13-6)	
BCF fish 1	< 10
Log Pow	-1.59 (at 25 °C)
Bioaccumulative Potential	Not Established

Monopotassium Phosphate (7778-77-0)	
Bioaccumulative Potential	Not Established

12.4. Mobility in Soil: No additional information available.

12.5. Other Adverse Effects: No additional information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Sewage Disposal Recommendations: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Waste Disposal Recommendations: Place in an appropriate container and dispose of the contaminated material at a licensed site.

Additional Information: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT: Not regulated for transport

14.2. In Accordance with IMDG: Not regulated for transport

14.3. In Accordance with IATA: Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Schultz Water Soluble Fertilizer – All Analyses
NOT Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed on the United States TSCA (Toxic Substances Control Act) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable *de minimis* concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. US State Regulations: No additional information available.

SECTION 16: OTHER INFORMATION

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Aquatic Acute 2	Toxic to aquatic environment - Acute Hazard Category 2
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H315	Causes skin irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H401	Toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

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