

Safety Data Sheet

Issue Date: 02-Sep-2020

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Version 1

1. IDENTIFICATION

Product identifier

Product Name Autumn Care 6-12-12

Other means of identification

SDS # GRPR-062

UN/ID No UN1760

Recommended use of the chemical and restrictions on use

Recommended Use Fertilizer.

Details of the supplier of the safety data sheet

Supplier Address

Plant Health Intermediate DBA Douglas Plant Health
1550 E Old 210 HWY
Liberty, MO 64068

Emergency telephone number

Company Phone Number (914) 428-1316
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Physical state Liquid

Classification

| | |
|---|---------------------------|
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Skin corrosion/irritation | Category 1 Sub-category A |
| Serious eye damage/eye irritation | Category 1 |

Signal Word

Danger

Hazard statements

Harmful if inhaled
Causes severe skin burns and eye damage



Precautionary Statements - Prevention

Use only outdoors or in a well-ventilated area
Do not breathe dusts or mists
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER or doctor

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name | CAS No | Weight-% |
|---------------------|------------|----------|
| Potassium hydroxide | 1310-58-3 | 10-15 |
| Phosphoric Acid | 7664-38-2 | 10-15 |
| Fe EDTA | 15708-41-5 | 5-10 |
| Manganese EDTA | 15375-84-5 | 1-5 |

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

| | |
|-----------------------|---|
| General Advice | Provide this SDS to medical personnel for treatment. |
| Eye Contact | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician. |
| Skin Contact | Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center or doctor/physician. |
| Inhalation | Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician. |
| Ingestion | Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician. |

Most important symptoms and effects, both acute and delayed

| | |
|-----------------|--|
| Symptoms | Harmful if inhaled. May be harmful if swallowed. |
|-----------------|--|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|---------------------------|------------------------|

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Environmental precautions

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use only outdoors or in a well-ventilated area. Do not breathe dusts or mists. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------------------------|---|---|---|
| Potassium hydroxide 1310-58-3 | Ceiling: 2 mg/m ³ | (vacated) Ceiling: 2 mg/m ³ | Ceiling: 2 mg/m ³ |
| Phosphoric Acid 7664-38-2 | STEL: 3 mg/m ³ TWA: 1 mg/m ³ | TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³ (vacated) STEL: 3 mg/m ³ | IDLH: 1000 mg/m ³ TWA: 1 mg/m ³ STEL: 3 mg/m ³ |
| Fe EDTA 15708-41-5 | TWA: 1 mg/m ³ Fe | (vacated) TWA: 1 mg/m ³ Fe | TWA: 1 mg/m ³ Fe |
| Manganese EDTA 15375-84-5 | - | (vacated) Ceiling: 5 mg/m ³ Ceiling: 5 mg/m ³ Mn | IDLH: 500 mg/m ³ Mn TWA: 1 mg/m ³ Mn STEL: 3 mg/m ³ Mn |

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear eye/face protection. Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|-----------------------|----------------|-----------------------|----------------|
| Physical state | Liquid | Odor | Not determined |
| Appearance | Not determined | Odor Threshold | Not determined |
| Color | Not determined | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|----------------------|--------------------------------|
| pH | Not determined | |
| Melting point / freezing point | Not determined | |
| Boiling point / boiling range | Not determined | |
| Flash point | Not determined | |
| Evaporation Rate | Not determined | |
| Flammability (Solid, Gas) | Not determined | |
| Flammability Limit in Air | | |
| Upper flammability or explosive limits | Not determined | |
| Lower flammability or explosive limits | Not determined | |
| Vapor Pressure | Not determined | |
| Vapor Density | Not determined | |
| Relative Density | Not determined | |
| Water Solubility | Not determined | |
| Solubility in other solvents | Not determined | |
| Partition Coefficient | Not determined | |
| Autoignition temperature | Not determined | |
| Decomposition temperature | Not determined | |
| Kinematic viscosity | Not determined | |
| Dynamic Viscosity | Not determined | |
| Explosive Properties | Not determined | |
| Oxidizing Properties | Not determined | |

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

| | |
|---------------------|------------------------------|
| Eye Contact | Causes severe eye damage. |
| Skin Contact | Causes severe skin burns. |
| Inhalation | Harmful if inhaled. |
| Ingestion | May be harmful if swallowed. |

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------------|---------------------------------------|-------------------------|-------------------------------------|
| Potassium hydroxide 1310-58-3 | = 284 mg/kg (Rat) | - | - |
| Urea 57-13-6 | = 8471 mg/kg (Rat) | - | - |
| Phosphoric Acid 7664-38-2 | = 1530 mg/kg (Rat) | = 2740 mg/kg (Rabbit) | > 850 mg/m ³ (Rat) 1 h |
| Fe EDTA 15708-41-5 | > 5000 mg/kg (Rat) = 5 g/kg (Rat) | > 5000 mg/kg (Rat) | > 2.05 g/m ³ (Rat) 4 h |
| Ammonium Polyphosphate 68333-79-9 | > 2000 mg/kg (Rat) | - | - |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Oral LD50 2,401.50 mg/kg
Dermal LD50 18,134.10 mg/kg
ATEmix (inhalation-dust/mist) 4.571 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|--------------------------------------|----------------------|--|--|
| Potassium hydroxide 1310-58-3 | | 80: 96 h Gambusia affinis mg/L LC50 static | |
| Urea 57-13-6 | | 16200 - 18300: 96 h Poecilia reticulata mg/L LC50 | 10000: 24 h Daphnia magna Straus mg/L EC50 3910: 48 h Daphnia magna mg/L EC50 Static |
| Phosphoric Acid 7664-38-2 | | 3 - 3.5: 96 h Gambusia affinis mg/L LC50 | 4.6: 12 h Daphnia magna mg/L EC50 |
| Fe EDTA 15708-41-5 | | 100: 96 h Oncorhynchus mykiss mg/L LC50 static | |
| Ammonium Polyphosphate 68333-79-9 | | 685 - 1066: 96 h Oncorhynchus mykiss mg/L LC50 static 123: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 389 - 654: 96 h Pimephales promelas mg/L LC50 static 500: 96 h Brachydanio rerio mg/L LC50 static | |

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

| Chemical name | Partition coefficient |
|----------------------------------|-----------------------|
| Potassium hydroxide 1310-58-3 | 0.83 |

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

| Chemical name | California Hazardous Waste Status |
|----------------------------------|-----------------------------------|
| Potassium hydroxide 1310-58-3 | Toxic Corrosive |
| Phosphoric Acid 7664-38-2 | Corrosive |

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN1760
Proper Shipping Name Corrosive liquid, n.o.s. (Potassium hydroxide, Phosphoric acid)
Hazard class 8
Packing Group II

IATA

UN number UN1760
Proper Shipping Name Corrosive liquid, n.o.s. (Potassium hydroxide, Phosphoric acid)
Transport hazard class(es) 8
Packing Group II

IMDG

UN number UN1760
Proper Shipping Name Corrosive liquid, n.o.s. (Potassium hydroxide, Phosphoric acid)
Transport hazard class(es) 8
Packing Group II

15. REGULATORY INFORMATION

International Inventories

| Chemical name | TSCA | TSCA Inventory Status | DSL/NDSL | EINECS/ELI NCS | ENCS | IECSC | KECL | PICCS | AICS |
|------------------------|------|-----------------------|----------|----------------|------|-------|------|-------|------|
| Water | X | ACTIVE | X | X | X | X | X | X | X |
| Potassium hydroxide | X | ACTIVE | X | X | X | X | X | X | X |
| Urea | X | ACTIVE | X | X | X | X | X | X | X |
| Phosphoric Acid | X | ACTIVE | X | X | X | X | X | X | X |
| Fe EDTA | X | ACTIVE | X | X | | X | X | X | X |
| Ammonium Polyphosphate | X | ACTIVE | X | X | X | X | X | X | X |
| Manganese EDTA | X | ACTIVE | X | X | X | X | | | X |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|----------------------------------|--------------------------|----------------|--|
| Potassium hydroxide 1310-58-3 | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |
| Phosphoric Acid 7664-38-2 | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical name | CAS No | Weight-% | SARA 313 - Threshold Values % |
|-----------------------------|------------|----------|-------------------------------|
| Manganese EDTA - 15375-84-5 | 15375-84-5 | 1-5 | 1.0 |

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Potassium hydroxide | 1000 lb | | | X |
| Phosphoric Acid | 5000 lb | | | X |

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|----------------------------------|------------|---------------|--------------|
| Potassium hydroxide 1310-58-3 | X | X | X |
| Phosphoric Acid 7664-38-2 | X | X | X |
| Fe EDTA 15708-41-5 | | | X |
| Manganese EDTA 15375-84-5 | X | | X |

16. OTHER INFORMATION**NFPA****Health Hazards**

Not determined

Flammability

Not determined

Instability

Not determined

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical hazards

Not determined

Personal Protection

Not determined

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Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. 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, unless specified in the text.

End of Safety Data Sheet