Safety Data Sheet

Issue Date: 07-Apr-2020 **Revision Date:** 14-Apr-2020 **Version** 1

1. IDENTIFICATION

Product identifier

Product Name Pro-Balance 15-0-15

Other means of identification

SDS # GRPR-030

Recommended use of the chemical and restrictions on use

Recommended Use Turf and Ornamental Use Only.

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

This SDS was created using the criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and is compliant with the Globally Harmonized System of Labeling and Classification of Chemicals (GHS).

| Skin corrosion/irritation | Category 2 |
|-----------------------------------|------------|
| Serious eye damage/eye irritation | Category 2 |

Signal Word Warning

Hazard statements

Causes skin irritation
Causes serious eye irritation



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

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

If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of water and soap Take off contaminated clothing and wash before reuse If skin irritation occurs: Get medical advice/attention

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name | CAS No | Weight-% |
|--|------------|----------|
| Urea | 57-13-6 | 40-50 |
| Potassium Carbonate | 584-08-7 | 10-20 |
| Fe EDTA | 15708-41-5 | <1.0 |
| Manganese EDTA | 15375-84-5 | <1.0 |
| Ethylenediaminetetraacetic acid copper salt, | 14025-15-1 | <1.0 |
| tetrahydrate | | |

^{**}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

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. If eye irritation persists: Get medical

advice/attention.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician/poison center

if individual's condition declines or if symptoms persist.

Ingestion Rinse mouth. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything

by mouth to an unconscious person. Call a poison center or doctor/physician if you feel

unwell.

Most important symptoms and effects, both acute and delayed

Symptoms Causes eye and skin irritation. May cause nausea, vomiting, stomach ache, and diarrhea.

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

Product is not flammable or combustible.

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 PrecautionsUse personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an

absorbent material.

Methods for Clean-UpReclaim where possible. Sweep up and shovel into suitable 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. Wear appropriate

personal protective equipment. Wash face, hands and any exposed skin thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or

clothing.

Conditions for safe storage, including any incompatibilities

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

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--|-------------------------------|--|--|
| Fe EDTA | TWA: 1 mg/m³ Fe | (vacated) TWA: 1 mg/m³ Fe | TWA: 1 mg/m ³ Fe |
| 15708-41-5 | | | |
| Manganese EDTA | - | (vacated) Ceiling: 5 mg/m ³ | IDLH: 500 mg/m ³ Mn |
| 15375-84-5 | | Ceiling: 5 mg/m ³ Mn | TWA: 1 mg/m ³ Mn |
| | | | STEL: 3 mg/m ³ Mn |
| Ethylenediaminetetraacetic acid copper | TWA: 1 mg/m³ Cu dust and mist | - | IDLH: 100 mg/m ³ Cu dust and |
| salt, tetrahydrate | | | mist |
| 14025-15-1 | | | TWA: 1 mg/m ³ Cu dust and mis |

Appropriate engineering controls

Engineering ControlsApply technical measures to comply with the occupational exposure limits. Maintain eye

wash fountain and quick-drench facilities in work area.

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 If necessary, wear a MSHA/NIOSH-approved respirator. Refer to 29 CFR 1910.134 for

respiratory protection requirements.

General Hygiene Considerations Avoid contact with skin, eyes and clothing. After handling this product, wash hands before

eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before

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reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

AppearanceNot determinedOdorNot determinedColorNot determinedOdor ThresholdNot determined

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH Not determined
Melting point / freezing point
Boiling point / boiling range
Flash point
Evaporation Rate
Flammability (Solid, Gas)
Not determined
Not determined
Not determined
Not determined
Not determined

Flammability Limit in Air

Upper flammability or explosive Not determined

limits

Lower flammability or explosive Not determined

limits

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 **Dvnamic 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

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye irritation.

Skin Contact Causes skin irritation.

Inhalation Do not inhale.

Ingestion May cause nausea, vomiting, stomach ache, and diarrhea.

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------------------|--------------------------------|-------------------|---------------------|
| Urea 57-13-6 | = 8471 mg/kg (Rat) | - | - |
| Potassium Carbonate 584-08-7 | = 1870 mg/kg (Rat) | - | - |
| Water 7732-18-5 | > 90 mL/kg(Rat) | - | - |
| Fe EDTA 15708-41-5 | > 5000 mg/kg(Rat)= 5 g/kg(Rat) | > 5000 mg/kg(Rat) | > 2.05 g/m³(Rat)4 h |
| Zinc EDT 14025-21-9 | = 1750 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 5,510.50 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|---------------|----------------------|------------------------------|----------------------------------|
| Urea | | 16200 - 18300: 96 h Poecilia | 10000: 24 h Daphnia magna Straus |
| 57-13-6 | | reticulata mg/L LC50 | mg/L EC50 3910: 48 h Daphnia |
| | | | magna mg/L EC50 Static |

| Potassium Carbonate 584-08-7 | | 630: 48 h Ceriodaphnia dubia mg/L LC50 |
|--|---|---|
| Fe EDTA 15708-41-5 | 100: 96 h Oncorhynchus mykiss mg/L LC50 static | |
| Zinc EDT 14025-21-9 | 685: 96 h Lepomis macrochirus mg/L LC50 static | |
| Ethylenediaminetetraacetic acid copper salt, tetrahydrate 14025-15-1 | 555: 96 h Lepomis macrochirus mg/L LC50 static | |

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Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| Urea | -1.59 |
| 57-13-6 | |

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 |
|---|-----------------------------------|
| Ethylenediaminetetraacetic acid copper salt, tetrahydrate | Toxic |
| 14025-15-1 | |

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

| Chemical name | TSCA | TSCA Inventory Status | DSL/NDSL | EINECS/ELI NCS | ENCS | IECSC | KECL | PICCS | AICS |
|---|------|--------------------------|----------|-------------------|------|-------|------|-------|------|
| Urea | Х | ACTIVE | Х | X | Х | X | Х | X | Х |
| Methylene diurea | | | | X | | Х | | | |
| Potassium Carbonate | Х | ACTIVE | Х | Х | Х | Х | Х | Х | Х |
| Water | Х | ACTIVE | Х | X | Х | Х | Х | X | Х |
| Fe EDTA | Х | ACTIVE | X | X | | X | X | Х | Х |
| Manganese EDTA | Х | ACTIVE | Х | Х | Х | Х | | | Х |
| Zinc EDT | Х | ACTIVE | Х | Х | Х | Х | | | Х |
| Ethylenediaminetetraacetic acid copper salt, tetrahydrate | | ACTIVE | Х | Х | Х | Х | Х | Х | Х |

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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

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 | <1.0 | 1.0 |
| Zinc EDT - 14025-21-9 | 14025-21-9 | <1.0 | 1.0 |
| Ethylenediaminetetraacetic acid copper salt, tetrahydrate - 14025-15-1 | 14025-15-1 | <1.0 | 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 |
|---|--------------------------------|------------------------|---------------------------|-------------------------------|
| Ethylenediaminetetraacetic acid copper salt, tetrahydrate | | 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 |
|---------------------------------|------------|---------------|--------------|
| Water | | | X |
| 7732-18-5 | | | |
| Fe EDTA | | | X |
| 15708-41-5 | | | |
| Manganese EDTA | X | | X |
| 15375-84-5 | | | |
| Zinc EDT | X | | X |
| 14025-21-9 | | | |
| Ethylenediaminetetraacetic acid | X | | X |
| copper salt, tetrahydrate | | | |
| 14025-15-1 | | | |

16. OTHER INFORMATION

NFPA **Health Hazards Flammability** Instability **Special Hazards** Not determined Not determined Not determined Not determined **Health Hazards Flammability** Physical hazards **Personal Protection HMIS** Not determined Not determined Not determined Not determined

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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