

**Gro-Power<sup>®</sup> PLUS 5-3-1, Premium Green<sup>®</sup> 5-3-1  
Safety Data Sheet**

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

Revision Date: 10/14/2015

Date of Issue: 12/01/2014

Version: 2.0

**SECTION 1: IDENTIFICATION**

**Product Identifier**

Product Form: Mixture  
Product Name: Gro-Power PLUS 5-3-1  
Gro-Power Premium Green 5-3-1

**Intended Use of the Product**

Fertilizer - General landscape / sport turf.

**Name, Address, and Telephone of the Responsible Party**

Company: Gro-Power, Inc.  
15065 Telephone Avenue, Chino, CA USA 91710-9614  
1-800-473-1307 / 1-909-393-3744

**Emergency Telephone Number**

CHEMTREC 1-800-424-9300

**SECTION 2: HAZARD(S) IDENTIFICATION**

**Classification of the Substance or Mixture**

**Classification (GHS-US):**

Skin Irrit. 2 H315  
Eye irrit. 2B H320  
STOT SE 3 H335  
Aquatic acute 1 H400  
Aquatic acute 1 H402  
Aquatic acute 1 H410

**Label Elements**

**GHS-US Labeling**

Hazard Pictograms (GHS-US):



Signal Word (GHS-US): Warning

Hazard Statements (GHS-US): H315 Causes skin irritation.  
H320 Causes eye irritation.  
H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.  
H402 Harmful to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements (GHS-US): P261 Avoid breathing dust.  
P264 Wash hands, forearms and face thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear eye protection, protective clothing, protective gloves.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P304+P340 IF INHALATED: Remove person to fresh air and keep at rest in a position comfortable for breathing.  
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 doctor, a POISON CENTER if you feel unwell.  
P321 Specific treatment (see Section 4)  
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 and wash before reuse.  
P403+P233 Store in a well ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

**Other Hazards**

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Exposure may aggravate those with pre-existing eye, skin or respiratory conditions.

### Unknown Acute Toxicity (GHS-US)

Not available

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Humic acid	1415-93-6	76.79	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Urea	57-13-6	8.75	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
DAP- Di-Ammonium phosphate	7783-28-0	7.25	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335 Aquatic Acute 3, H402
Potassium Sulfate	7778-80-5	3.0	Not classified
Iron Oxide	1317-61-9	3.0	Not classified
Zinc oxide	1314-13-2	0.105	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Manganese Oxide	1344-43-0	.105	Not classified
Alkyl Naphthalene Sodium Sulfonate	25638-17-9	1.0	Not classified

## SECTION 4: FIRST AID MEASURES

### Description of First Aid Measures

- General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.
- Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
- Skin Contact: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.
- Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
- Ingestion: DO NOT induce vomiting. Rinse mouth. Obtain medical attention.

### Most Important Symptoms and Effects Both Acute and Delayed

- General: Irritation to eyes, skin and respiratory tract.
- Inhalation: May cause respiratory irritation.
- Skin Contact: Causes skin irritation.
- Eye Contact: Causes eye irritation.
- Ingestion: Ingestion not likely to be harmful or have adverse effects.
- Chronic Symptoms: None expected under normal conditions of use.

### Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

- Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.
- Unsuitable Extinguishing Media: None identified

### Special Hazards Arising From the Substance or Mixture

- Fire Hazard: Not considered flammable but may burn at high temperatures.
- Explosion Hazard: Product is not explosive.
- Reactivity: Hazardous reactions will not occur under normal conditions.

### Advice for Firefighters

- Precautionary Measures: Exercise caution when fighting any chemical fire.
- Firefighting Instructions: Use water spray or fog for cooling exposed containers.
- Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory

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protection.  
 Hazardous Combustion Products: Not available  
 Other Information: Refer to Section 9 for flammability properties

### Reference to Other Sections

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid contact with skin, eyes, or clothing. Avoid breathing dust.

#### For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).  
 Emergency Procedures: Evacuate unnecessary personnel.

#### For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.  
 Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

### Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

### Methods and Materials for Containment and Cleaning Up

For Containment: Contain and collect as any solid.  
 Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### Reference to Other Sections

See Section 8. Exposure controls and personal protection.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work.

### Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.  
 Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.  
 Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

## SECTION 8: EXPOSE CONTROLS/PERSONAL PROTECTION

### Control Parameters

For substances listed in Section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

DAP- Di-Ammonium Phosphate (7783-28-0)		
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (respirable fraction)
USA ACGIH	OSHA PEL (TWA) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable fraction) 3 mg/m <sup>3</sup> (respirable fraction)
Zinc Oxide (1314-13-2)		
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable fraction) 5 mg/m <sup>3</sup> (fume)
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (dust) 5 mg/m <sup>3</sup> (fume)
Manganese Oxide (1344-43-0)		
USA OSHA	OSHA PEL (ceiling) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (inhalable fraction) 0.02 mg/m <sup>3</sup> (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> (fume)

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### Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles, Gloves. Protective clothing.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NOISH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

Physical State: Solid

Appearance: Blackish brown granule

Odor: None

Odor Threshold: Not available

pH: 5.25

Evaporation Rate: Not available

Melting Point: Not available

Freezing Point: Not available

Boiling Point: Not available

Flash Point: Not available

Auto-ignition Temperature: Not available

Decomposition Temperature: Not available

Flammability (solid, gas): Not available

Lower Flammable Limit: Not available

Upper Flammable Limit: Not available

Vapor Pressure: Not available

Relative Vapor Density at 20 °C: Not available

Relative Density: Not available

Specific Gravity: Not available

Solubility: Not available

Partition Coefficient: N-octanol/water: Not available

Viscosity: Not available

Explosion Data – Not expected to present an explosion hazard due to mechanical impact.

Sensitivity to Mechanical Impact:

Explosion Data – Not expected to present an explosion hazard due to static discharge.

Sensitivity to Static Discharge:

## SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see Section 7)

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Ignition sources & incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Hazardous Decomposition Products: Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects – Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

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Skin Corrosion/Irritation:	Causes skin irritation
Serious Eye Damage/Irritation:	Causes eye irritation
Respiratory or Skin Sensitization:	Not classified
Germ Cell Mutagenicity:	Not classified
Teratogenicity:	Not available
Carcinogenicity:	Not classified
Specific Target Organ Toxicity (Repeated Exposure):	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity (Single Exposure):	May cause respiratory irritation
Aspiration Hazard:	Not classified
Symptoms/Injuries After Inhalation:	May cause respiratory irritation
Symptoms/Injuries After Skin Contact:	Causes skin irritation
Symptoms/Injuries After Eye Contact:	Causes eye irritation
Symptoms/Injuries After Ingestion:	Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms:	None expected under normal conditions of use.

### Information on Toxicological Effects – Ingredient(s)

LD50 and LC50 Data:

<b>Urea (57-13-6)</b>	
LD50 oral - rat	8471 mg/kg
LD50 dermal - rat	>3000 mg/kg
<b>DAP- Di-Ammonium Phosphate (7783-28-0)</b>	
LD50 oral - rat	>2000 mg/kg
LD50 dermal - rat	>5000 mg/kg
<b>Potassium sulfate (7778-80-5)</b>	
LD50 oral - rat	>2000 mg/kg
LD50 dermal - rat	>2000 mg/kg
LC50 inhalation - rat	1.2 mg/l
<b>Iron oxide (1317-61-9)</b>	
LD50 oral - rat	>5000 mg/kg
<b>Zinc Oxide (1314-13-2)</b>	
LD50 oral - rat	7340 mg/kg
LC50 inhalation - mouse	2500 mg/m <sup>3</sup>
<b>Manganese Oxide (1344-43-0)</b>	
LD50 oral - rat	>2000 mg/kg
LC50 inhalation - rat	>5.35 mg/l

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

<b>Urea (57-13-6)</b>	
LC 50 Fish 1	16200-18300 mg/l (Poecilia reticulata) 96 h
EC50 Daphnia 1	3910 mg/l (Daphnia magna) 48 h
Persistence and Degradability:	Inherently biodegradable
Bioaccumulative Potential:	Not available
Mobility in Soil:	Not available
Other Adverse Effects:	Avoid release to the environment
<b>DAP- Di-Ammonium Phosphate (7783-28-0)</b>	
LC 50 Fish 1	26.5 mg/l (Oncorhynchus mykiss ) 96 h
EC50 Daphnia	No data available
Persistence and Degradability:	Inherently biodegradable
Bioaccumulative Potential:	Not available
Mobility in Soil:	Not available
Other Adverse Effects:	Avoid release to the environment
<b>Potassium Sulfate (7778-80-5)</b>	
LC 50 Fish 1	653 mg/l (Lepomis macrochirus) 96 h
EC50 Daphnia 1	890 mg/l (Daphnia magna) 48 h

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Persistence and Degradability: Inherently biodegradable  
 Bioaccumulative Potential: Not available  
 Mobility in Soil: Not available  
 Other Adverse Effects: Not available

### Zinc Oxide (1314-13-2)

LC 50 Fish 1.1 mg/l (Oncorhynchus mykiss ) 96 h

EC50 Daphnia 0.098 mg/l (Daphnia magna) 48 h

Persistence and Degradability: Not available  
 Bioaccumulative Potential: Not available  
 Mobility in Soil: Not available  
 Other Adverse Effects: Very toxic to aquatic life

### Manganese Oxide (1344-43-0)

LC 50 Fish 1.2 mg/l (Oncorhynchus mykiss ) 96 h

EC50 Daphnia 4 mg/l (Daphnia magna) 48 h

Persistence and Degradability: Not available  
 Bioaccumulative Potential: Not available  
 Mobility in Soil: Not available  
 Other Adverse Effects: Not available

## SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology – Waste Materials: Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT : Not regulated for transport

In Accordance with IMDG: Not regulated for transport

In Accordance with IATA : Not regulated for transport

In Accordance with TDG : Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

**US Federal Regulations:** All components of this product are listed, or excluded from listing, on the U.S. EPA TSCA (Toxic Substances Control Act) inventory

**US State Regulations:**

Zinc Oxide (1314-13-2) U.S. – Massachusetts – Right to Know List  
 U.S. – New Jersey – Right to Know Hazardous Substance List  
 U.S. – Pennsylvania – RTK (Right to Know) List

Manganese Oxide (1344-43-0) U.S. – New Jersey – Right to Know Hazardous Substance List  
 U.S. – Pennsylvania – RTK (Right to Know) List

**CA Prop 65** Warning: this product contains chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

CAS No. 7783-28-0 DAP- Di-Ammonium phosphate

### Canadian Regulations

WHMIS Classification Class D Division 2 Subdivision B – Toxic material causing other toxic effects



### Humic acids (1415-93-6)

Listed on the Canadian DSL (Non-Domestic Substances List)

WHMIS Classification Class D Division 2 Subdivision B – Toxic material causing other toxic effects

### Urea (57-13-6)

Listed on the Canadian DSL (Non-Domestic Substances List)

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

### Di-ammonium Phosphate (7783-28-0)

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Listed on the Canadian DSL (Non-Domestic Substances List)	
<b>Potassium Sulfate (7778-80-5)</b>	
Listed on the Canadian DSL (Non-Domestic Substances List)	
WHIMIS Classification	Uncontrolled product according to WHMIS classification criteria
<b>Alkyl Naphthalene Sodium Sulfonate (25638-17-9)</b>	
Listed on the Canadian DSL (Domestic Substances List)	

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

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date: 10/14/2015

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

### Party Responsible for the Preparation of This Document

Gro-Power, Inc.  
15065 Telephone Avenue  
Chino, CA USA 91710-9614  
1-800-473-1307 / 1-909-393-3744

*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.*

North America GHS US 2012 & WHMIS 2