

# Better-Gro Orchid Plus 20-14-13

## SAFETY DATA SHEET

SDS#: 1001

Review/Revision Date: 07/25/14

### SECTION I - General Information And Chemical Product Identification

Trade Name: **Better-Gro Orchid Plus 20-14-13**

CAS #: Mixture

Chemical Name: **Dry Fertilizer 20-14-13**

Synonyms:

D.O.T. Shipping Name: **Fertilizing Compound, NOI, Not regulated by DOT**Application/Uses: **Fertilizing Compound**

Distributor Information: **Plant Foods, Inc. 772-567-5741**  
P.O. Box 1089 (32961 – 1089)  
5051 41<sup>st</sup> Street  
Vero Beach, Florida 32967

### SECTION II - Hazard(s) Identification

Route(s) of Entry: Ingestion and Dermal.

#### Emergency Overview

Ammonium nitrate is an allergen. Prolonged or repeated direct contact with fertilizer may irritate eyes and skin. Inhalation of dust may irritate nose, throat, and lungs. Prolonged exposure may cause weakness, depression, headache, mental impairment, anemia, methemoglobinemia, and kidney injury. Ingestion of product can cause severe gastrointestinal irritation, muscular weakness, and blue-tinged skin (cyanosis). Infants and children are especially at risk of cyanosis. Ingestion of large amounts may result in death.  
Product is a blue, dry/granular fertilizer.  
Product is 100% soluble.



#### Potential Health Effects:

**Eye:** Cause irritation, redness, pain **Inhalation:** Inhalation of dust may irritate nose, throat, and lungs. **Ingestion:** Causes irritation to the gastrointestinal tract. **Carcinogenicity:** None

#### SIGNS & SYMPTOMS OF EXPOSURE:

Eye redness and itching  
Coughing and shortness of breath if inhaled.

### SECTION III - Composition/information On Ingredients

CAS#:	Common Name:	% by Wt.
6484-52-2	Ammonium Nitrate	35-45
7757-79-1	Potassium Nitrate	25-36
7722-76-1	Monoammonium Phosphate	20-31
10043-35-3	Boric Acid	< 1
14025-15-1	Copper EDTA	< 1
15375-84-5	Manganese EDTA	< 1
15708-41-5	Iron EDTA	.5-2
14025-21-9	Zinc EDTA	< 1
7631-95-0	Sodium Molybdate	< 1
7487-88-9	Magnesium Sulfate	1-7

**SECTION IV - First Aid Information****Ingestion:**

**Never give anything to eat or drink to someone who is unconscious, having convulsions, or unable to swallow.** Have conscious person drink 1 to 2 glasses of water, then induce repeated vomiting until vomit is clear. Call Physician.

**Eyes:**

Flush eyes with large quantities of running water for a minimum of 15 minutes. If victim is wearing contact lenses, remove them. Hold eyelids apart during the flushing to ensure rinsing of entire surface of the eye and lids with water. DO NOT let victim rub eye(s). Do not attempt to neutralize with chemical agents. Get medical attention if eye irritation occurs.

**Skin:**

Remove contaminated clothing and immediately wash with soap and water for a minimum of 15 minutes. Wash clothing before reuse. Get medical attention if irritation occurs.

**Inhalation:**

Remove to fresh air. Treat symptomatically.

**SECTION V - Fire And Explosion Data****Flash Point:**

Decomposes on Heating

**Flammable Limits:**

Not Established

**Autoignition Temp:**

None.

**LEL:**

N/A

**UEL:**

N/A

**Extinguisher Media**

Use UL Approved Fire Extinguisher/Water

**Special Fire Fighting Procedures**

Positive pressure self-contained breathing apparatus (SCBA) should be used when there is a potential for inhalation of vapors and/or fumes. Wear full fire fighting protective equipment that is appropriate for conditions.

**Unusual Fire and Explosion Hazards**

This is an oxidizer when combined with a fuel and ignition source it has the potential to release a large amount of oxygen accelerating the flame to the point of explosion. Smothering the fire with steam or material is ineffective as oxygen is produced by the decomposition. During a fire, irritating/toxic gasses may be generated.

**Hazardous Combustion Products:**

When UAN is heated to decomposition it may produce vapors containing nitrogen oxides and ammonia.

**Section VI- Accidental Release Measures****STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Keep spilled product and any rinse water from entering sewers or waterways. Contain spilled product by sweeping up if a small spill or by diking area with sand or earth if a large spill. Avoid dust formation. Scoop or sweep up material and place in a container for disposal. If product is uncontaminated, spilled material may be applied at the rate recommended on the label. Never return spills to original containers for re-use. After removal of spilled product, flush contaminated area thoroughly with water. Any spillage should be contained and recovered.

**Section VII- Handling and Storage**

**Handling:** Avoid excessive generation of dust. Avoid unnecessary exposure to the atmosphere to prevent moisture pick up, which makes the material difficult to handle. Do not mix with mineral acids, chlorine, oxidizing agents, alkalis, diesel, oils and greases. Avoid breathing dust. Immediately clean up spills that occur during handling. Practice good hygiene after using product, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**Storage:** Store in a cool, dry area away from children, feed and food products. Store away from incompatible materials. Protect packaging from physical damage.

**Minimum Storage Temperature:** Not applicable

**Other Precautions:** Consult Federal, state, and local laws and regulations pertaining to storage.

**Incompatibility:** N/A

**Hazardous Polymerization:** Will not occur

**Section VIII - Exposure Control and Personal Protection****Skin Protection**

None required for normal use. If prolonged or repeated use irritates skin, use natural rubber gloves.

**Respiratory Protection**

If airborne dust levels are high or irritation occurs, use NIOSH/MSHA approved equipment based on actual or potential airborne concentrations.

**Eye Protection**

It is generally regarded as good practice to wear a minimum of safety glasses with side shields if there is potential for contact the eyes. None is required for routine use as a fertilizer. High airborne dust levels or mists of product dissolved in liquid may be irritating: use chemical goggles.

**Other Protection:**

Safety shower and eyewash fountain or at least 5 gallons of accessible clean water should be provided in a UAN handling area.

**Ventilation Limits:**

Local exhaust normally sufficient.

**Exposure Limits**

None known

**Hygienic Practices:**

All food and smoking materials should be kept in a separate area away from the storage/use location. Eating, drinking and smoking should be prohibited in areas where there is a potential for significant exposure to this material. Before eating, drinking or smoking, hands and face should be thoroughly washed.

**Section IX - Physical and Chemical Properties**

**Molecular Weight:** Unknown

**Specific Gravity:** 45.1-47.2 lbs/ft<sup>3</sup>

**Boiling Point:** Decomposes on heating

**Vapor Pressure(mm/hg):** Not known

**Evaporation Rate:** N/A

**Appearance And Odor:** Blue powder with a slightly yeasty odor

**Solubility:** 100%

**Solubility In Water:** 3.5 lbs/gal

**Hazardous Polymerization:** Will not occur

**Stability:** Yes

**Incompatibility:** Nitrates are incompatible with strong alkalis and reducing agents, active metals (such as aluminum and magnesium), ammonia, organic and combustible materials.

**Section X - Stability and Reactivity****Stability:**

This product is stable at ambient temperatures and atmospheric pressures.

**Conditions to Avoid:**

Extreme heat. Contact with strong alkalis, oxidizers, and reducing agents. Contact with fuels and other organic or combustible materials. Active metals such as aluminum and magnesium. Strong alkalis and reducing agents. Chlorine compounds.

**Incompatible Materials:**

Nitrates are incompatible with strong alkalis and reducing agents, active metals (such as aluminum and magnesium), ammonia, organic and combustible materials.

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**Hazardous Decomposition Products:**

In a fire, may produce oxides of nitrogen, potassium, phosphorus, and sulfur, as well as ammonia.

**Polymerization Conditions To Avoid:**

Hazardous polymerization is not expected to occur.

**Section XI - Toxicological Information****Eye Effects:**

Not an irritant. It is expected that this product would be minimally irritating to eyes based on tests with similar products.

**Skin Effects:**

Chronic dermal exposure effects for this product are not known. May cause irritation to susceptible persons.

**Dermal Toxicity:**

Dermal toxicity data is not available.

**Inhalation Effects:**

Inhalation toxicity data is not available. Chronic inhalation exposure effects are not known.

**Sensitization:**

May cause sensitization of susceptible persons.

**Ingestion Effects:**

Health injuries are not known or expected under normal use. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Carcinogenicity/Mutagenicity:**

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens. Not a mutagen.

**Reproductive Effects:**

No known reproductive effects.

**Neurotoxicity:**

The neurotoxic effects of this product are not known.

**Target Organs:**

Target organ effects of this material are not available.

**Additional Toxicological Information:**

No other toxic effects for this product are known.

**Section XII- Ecological Information**

**Biodegradability:** Degrades slowly.

**Ecotoxicity:** May be toxic to aquatic organisms.

**Biological Oxygen Demand (BOD5):** Not evaluated.

**Chemical Oxygen Demand:** Not evaluated.

**Activated Sludge Respiration Inhibition Test:** Not evaluated.

**Additional Ecological Information:** None.

**SECTION XIII - Disposal Considerations****Waste Disposal Methods:**

In unused condition, this product is not considered to be a RCRA defined hazardous waste by characteristics/listings. It is the responsibility of the waste generator to evaluate whether his wastes are hazardous by characteristic/listing. Dispose in accordance with all local, state and federal regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate.

**For Chemical Emergencies Call CHEMTREC - Day or Night - at 800 424 9300.**

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**Container Disposal Information:**

Containers should be cleaned of residual product before disposal. Empty containers should be disposed of in accordance with all applicable laws and regulations.

**Section XIV - Transport Information**

**Proper Shipping Name:** Fertilizing Compound

**D. O. T. Hazard Class:** Nitrates, inorganic, N.O.S., 5.1 UN1477, PGII

**Label Requirement:** This product is classified as an oxidizer for transportation purposes.

**Placard:** Oxidizer, 5.1, UN1477

**Packing Group:** N/A

**UN:** 1477

**RQ:**

**Section XV - Regulatory Information****State Right To Know Laws:**

The following ingredients are disclosed for compliance with State Right to Know Laws:

**CAS#** N/A **Chemical Name:** Dry Fertilizer 20-14-13

State RTK: None

**SARA Title III Hazard Classes Sections 311/312:**

Immediate (acute) health hazard

**OSHA Status:**

This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

**TSCA Status:**

Listed/Non-reportable

**SARA Section 313 :**

This product contains the following toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act:

**CALIFORNIA PROPOSITION 65:**

This product does NOT contain a chemical or chemicals subject to California Proposition 65.

**Michigan Critical Materials:**

This product does not contain ingredients listed on the Michigan Critical Materials Register.

**CAA:** None known

**CWA:** None known

**RCRA:** Not a hazardous waste under RCRA.

**Canada CEPA:** All components are listed on the Canadian DSL

**Canada WHMIS:** None known

**SECTION XVI- Other Information**

NOTICE: OSHA STANDARD 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a Hazard Communication Program including training, labeling, Material Safety Data Sheets, and access to written records. We request that you, and it is your legal duty, make all information in this Material Safety Data Sheet available to your employees.

**For Chemical Emergencies Call CHEMTREC - Day or Night - at 800 424 9300.**

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**Key Legend Information:**

N/Av:	Not Available	N/A:	Not Applicable
N/R:	Not Rated	ND:	Not Determined
ACGI	American Conference of Govr'ntal Industrial Hygienists		
OSHA:	Occupational Saftey and Health Administration	TLV:	Threshold Limit Value
PEL:	Permissable Exposure Limit	TWA:	Time Weighted Average
STEL:	Short Term Exposure Limit	NTP:	National Toxicology Program
IARC:	International Agency for Research on Cancer	TSCA:	Toxic Substance Control Act
SARA Title III:	Superfund Amendments and Reauthorization Act	CERCLA:	Comprehensive Response, Compensation and Liability Act

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This Safety Data Sheet was prepared to comply with OSHA Hazard Communication standard. (29 CFR 1910.1200). This supersedes any previous information. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Plant Foods, Inc as to the effects of such use or the results to be obtained, nor does Plant Foods, Inc. assume any liability arising out of use, by others, of the products referred to herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist because of applicable laws or government regulations.