

1. IDENTIFICATION

Product Name: 20-20-20 Water Soluble Fertilizer, Power Pak 20-20-20
Date of issue: August 2015
Product identifier: 20-20-20
Recommended uses: Water Soluble Fertilizer
Restrictions on uses: Consult product label
Manufacturer: Southern Agricultural Insecticides, Inc.
P.O. Box 218
Palmetto, FL 34220
Company Telephone/Fax: (941) 722-3285/(941) 723-2974
Emergency Telephone Number: (800) 424-9300 (CHEMTREC)
CHEMTREC (International): 1-703-527-3887

2. HAZARD(S) IDENTIFICATION

OSHA Regulatory Status: This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not Hazardous: Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label Elements:

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance: Crystals, Prills **Physical State:** Solid **Odor:** Fertilizer

Hazards Not Otherwise Classified (HNOC):

Other Information:

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS-No	Weight %
Diammonium Phosphate	7783-28-0	20
Potassium Nitrate	7757-79-1	44
Monoammonium Phosphate	7722-76-1	15
Urea	57-13-6	18
Sodium Borate	12280-03-4	0.10
Copper Sulfate	7758-99-8	0.34

Iron EDTA 13%	15708-41-5	0.8
Manganese EDTA 13%	15375-84-5	0.40
Zinc EDTA 15%	14025-21-9	0.34

4. FIRST-AID MEASURES

First Aid Measures:

- Eye Contact:** If in eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
- Skin Contact:** If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Inhalation:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
- Ingestion:** Call a physician or Poison Control Centre immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Indication of Any Immediate Medical Attention and Special Treatment Needed:

Notes to Physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray, carbon dioxide, dry chemical, chemical foam.

Specific hazards: Dust at sufficient concentrations may form explosive mixtures with air.

Hazardous Combustion Products: Thermal decomposition can lead to release of irritating gases and vapors.

Explosion Data:

Sensitivity to Mechanical Impact:

no data available.

Sensitivity to Static Discharge:

no data available.

Special Protective Equipment for Firefighters: In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Personal Precautions: Wear suitable protective clothing.

Environmental Precautions: Prevent product from entering drains.

Methods and Material for Containment and Cleanup:

Methods for containment: Vacuum or sweep up material and place in a disposal container.
Methods for Cleanup: If material is uncontaminated, collect and reuse as recommended for product. If material is contaminated, put in appropriate container and dispose. Flush with water.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Handling: Avoid container breakage. Do not contaminate water sources when disposing of equipment wash waters. Keep out of lakes, streams or ponds.

Conditions for Safe Storage, Including any Incompatibilities:

Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Exposure Guidelines:

Ingredients	CAS-No	ACGIH:	OSHA:	IDLH:
Diammonium Phosphate	7783-28-0	NA	NA	Not Listed
Potassium Nitrate	7757-79-1	Not Listed	Not Listed	Not Listed
Monoammonium Phosphate	7722-76-1	Not Listed	Not Listed	Not Listed
Sodium Borate	12280-03-4	NA	PEL 5 mg/m ³	NA

Appropriate Engineering Controls:

Engineering Measures to Reduce Exposure Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

Individual Protection Measures, such as Personal Protection Equipment:

Eye/Face Protection: Eye/face protection is not required, but is recommended in manufacturing situations where contact may occur. Safety glasses with side shields or goggles.

Skin Protection: No special protective clothing is required under normal workplace conditions. If skin irritation occurs, use natural rubber gloves, durable cloth or impervious rubber gloves if contact with product is possible.

Respiratory Protection: If airborne levels are high or product does not remain intact, use a combination of engineering controls (e.g. ventilation) and personal protection, e.g., NIOSH/MSHA approved respirator for dusts, mists, and fumes

General hygiene considerations:

Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties:

Physical State:	blue
Odor:	Fertilizer
Appearance:	Crystals, Prills
Odor Threshold	No information available

Property	Values
pH:	5.4 (10% solution)
Melting Point/Freezing Point:	No information available
Boiling Point/Range:	No information available
Flash Point:	No information available
Evaporation Rate:	No information available
Flammability (solid, gas):	No information available
Flammability Limits in Air:	
Upper Flammability Limit:	No information available
Lower Flammability Limit:	No information available
Vapor Pressure:	No information available
Vapor Density:	No information available
Specific Gravity:	No information available
Solubility:	Highly soluble (>80)
Solubility in other Solvents:	No information available
Partition Coefficient:	No information available
Autoignition Temperature:	No information available
Decomposition Temperature:	decomposes on heating Decomposition begins @ 2120 F (DAP)
Kinematic Viscosity:	No information available
Dynamic Viscosity:	No information available
Explosive Properties:	No information available
Oxidizing Properties:	Not considered an oxidizer
Other Information:	
Softening Point:	No information available
Molecular Weight:	No information available
VOC Content (%):	No information available
Density:	No information available
Bulk density:	approx.50 lb/ft3

10. STABILITY AND REACTIVITY

Reactivity:	Stable under normal conditions
Chemically Stable:	yes

Conditions to Avoid: Extreme heat. Strong oxidizing agents. Contact with strong alkalis, oxidizers, and reducing agents. Contact with fuels and other organic or combustible materials. Active metals such as aluminum, magnesium, and chlorine compounds.

Materials to avoid Strong acids, bases, oxidizers, and reducing agents. Avoid contact with other chemicals. Fuels. Heavy metal salts.

Hazardous Decomposition Products: Combustion may produce irritating gases and vapors. Toxic metal oxides may be produced

Possibility of Hazardous Reactions: Poses little or no immediate hazard.

11. TOXICOLOGICAL INFORMATION

Information on the Likely Routes of Exposure (inhalation, ingestion, skin and eye contact):

Eye effects: Contact with eyes may cause irritation
Skin effects: May cause skin irritation in susceptible persons
Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Inhalation: May cause irritation of respiratory tract.

Component Information

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
<u>Diammonium Phosphate</u> 7783-28-0	No data available (Rat)	No data available (Rat)	No data available (Rat)
<u>Potassium Nitrate:</u> 7757-79-1	3015 mg/kg (Rat)	> 2000 mg/kg	> 527 mg/m3
<u>Monoammonium Phosphate</u> 7722-76-1	5750 mg/kg (Rat)	7940 mg/kg	No data available
<u>Sodium Borate</u> 12280-03-4	2550 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	>0.16mg/L (Rat)4h

Information on Toxicological Effects:

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure:

Sensitization: No information available
Mutagenic effects No information available
Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

Ingredients	ACGIH - Carcinogens	IARC:	NTP Report on Carcinogens List -	OSHA
Sodium Borate 12280-03-4	A2	-	-	-

Reproductive Toxicity	No information available.
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.
Aspiration Hazard	No information available.

Numerical Measures of Toxicity - Product Information:

LD50/oral:	No information available.
LD50/dermal:	No information available.
LC50/inhalation:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Unknown Aquatic Toxicity:

A small percent of the mixture consists of component(s) of unknown hazards to the aquatic environment

Ecotoxicity effects: May be toxic to aquatic organisms.

Persistence and degradability: Degrades slowly.

Ingredients	LOGPOW
Sodium Borate 12280-03-4	=-0.7570 @25° C (based on boric acid)

Mobility: This product is soluble in water and is leachable through normal soil. Adsorption to soils or sediments is insignificant.

Additional ecological information:

None

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: Do not reuse container.

14. TRANSPORT INFORMATION

The description shown may not apply to all situations. Consult 49 CFR, or appropriate dangerous goods regulations for additional description requirements (e.g. technical name) and mode-specific or quantity-specific shipping requirements.

DOT (Land)	Not DOT regulated
IATA (Air)	Not regulated
IMO/IMDG (Vessel)	Not regulated

15. REGULATORY INFORMATION

Federal Regulations:

SARA 313:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories:	No
Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act):

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

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). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

California Proposition 65:

U.S. State Right-to-Know Regulations:

U.S. EPA Label information:

EPA Pesticide Registration Number:

not applicable

16. OTHER INFORMATION

NFPA: Health: 1 Flammability: 0 Reactivity: 1

HMIS: Health: 1 Flammability: 0 Reactivity: 1
Reactivity: 1

Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Southern Agricultural Insecticides, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Southern Agricultural Insecticides, Inc. has been advised of the possibility of such damages.