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

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diammonium Phosphate</td>
<td>7783-28-0</td>
<td>20</td>
</tr>
<tr>
<td>Potassium Nitrate</td>
<td>7757-79-1</td>
<td>44</td>
</tr>
<tr>
<td>Monoammonium Phosphate</td>
<td>7722-76-1</td>
<td>15</td>
</tr>
<tr>
<td>Urea</td>
<td>57-13-6</td>
<td>18</td>
</tr>
<tr>
<td>Sodium Borate</td>
<td>12280-03-4</td>
<td>0.10</td>
</tr>
<tr>
<td>Copper Sulfate</td>
<td>7758-99-8</td>
<td>0.34</td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No</th>
<th>ACGIH:</th>
<th>OSHA:</th>
<th>IDLH:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diammonium Phosphate</td>
<td>7783-28-0</td>
<td>NA</td>
<td>NA</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Potassium Nitrate</td>
<td>7757-79-1</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Monoammonium Phosphate</td>
<td>7722-76-1</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Sodium Borate</td>
<td>12280-03-4</td>
<td>NA</td>
<td>PEL 5 mg/m³</td>
<td>NA</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>5.4 (10% solution)</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling Point/Range:</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limits in Air:</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limit:</td>
<td>No information available</td>
</tr>
<tr>
<td>Lower Flammability Limit:</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Highly soluble (&gt;80)</td>
</tr>
<tr>
<td>Solubility in other Solvents:</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition Coefficient:</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition Temperature:</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>decomposes on heating</td>
</tr>
<tr>
<td></td>
<td>Decomposition begins @ 2120 F (DAP)</td>
</tr>
<tr>
<td>Kinematic Viscosity:</td>
<td>No information available</td>
</tr>
<tr>
<td>Dynamic Viscosity:</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive Properties:</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing Properties:</td>
<td>Not considered an oxidizer</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>LD50 Oral (Rat)</th>
<th>LD50 Dermal (Rat)</th>
<th>LC50 Inhalation (Rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diammonium Phosphate</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Potassium Nitrate; 7757-79-1</td>
<td>3015 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg</td>
<td>&gt; 527 mg/m3</td>
</tr>
<tr>
<td>Monoammonium Phosphate</td>
<td>5750 mg/kg (Rat)</td>
<td>7940 mg/kg</td>
<td>No data available</td>
</tr>
<tr>
<td>Sodium Borate; 12280-03-4</td>
<td>2550 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>&gt;0.16mg/L (Rat)4h</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>ACGIH - Carcinogens</th>
<th>IARC:</th>
<th>NTP Report on Carcinogens List -</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Borate</td>
<td>A2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12280-03-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 components(s) of unknown hazards to the aquatic environment
**Ecotoxicity effects:**  May be toxic to aquatic organisms.
**Persistence and degradability:**  Degrades slowly.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>LOGPOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Borate</td>
<td>=-0.7570 @25°C (based on boric acid)</td>
</tr>
<tr>
<td>12280-03-4</td>
<td></td>
</tr>
</tbody>
</table>

**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:
- 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

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, however arising, even if Southern Agricultural Insecticides, Inc. has been advised of the possibility of such damages.