SECTION 1: IDENTIFICATION

Product Name: Ascend®
EPA Registration #: 9779-335
Product ID/Unity #: 10007258, 10118841, 10136225, 1400941
Common Name: Plant growth regulator
Chemical Description: Gibberellic acid, kinetin, and indole butyric acid
Recommended Uses: Agricultural Plant Growth Regulator – See product label for complete list of uses and use sites.
Restrictions for Use: See product label for information regarding restrictions on the use of this product.

Manufactured For:
WINFIELD SOLUTIONS, LLC
P. O. Box 64589
St. Paul, MN 55164-0589

MEDICAL EMERGENCY TELEPHONE NUMBER: 1-877-424-7452 (24hrs)
Non-Emergency Business Inquiries: 1-855-494-6343
Mon – Fri 8am – 5pm (Central Standard Time)

FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL:
CHEMTREC 1-800-424-9300 (24 hours)

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Dark greenish blue liquid with ammonia like odor. May cause mild but temporary eye irritation.

POTENTIAL HEALTH EFFECTS:
Eyes: May cause mild but temporary eye irritation clearing in less than 7 days.
Skin: May cause mild but temporary skin irritation with prolonged contact.
Inhalation: May cause mild irritation of the upper respiratory tract.
Ingestion: May cause irritation of the gastric system.
Preexisting Conditions: Preexisting respiratory conditions may be aggravated by exposure to mists.
Chronic Health Effects: None known.

Carcinogenicity
NTP: Not listed
IARC: Not listed
OSHA: Not listed

OSHA HCS 2012 CLASSIFICATION: Eye Irritation Category 2B

SIGNAL WORD: WARNING

HAZARD STATEMENTS:
Causes eye irritation.

Percent of product with unknown toxicity: 0%

PRECAUTIONARY STATEMENTS:
Prevention: Wash hands thoroughly after handling.
Response: If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage: See Section 7 for storage information.
Disposal: See Section 13 for disposal information.
SECTION 4: FIRST AID MEASURES

**Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.

**Ingestion:** Seek medical attention or call a poison control center for treatment advice. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Eyes:** Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if irritation persists.

**Skin:** Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if irritation persists.

SECTION 5: FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Dry chemical, foam, carbon dioxide, water fog or water spray.

**Special Fire Fighting Procedures:** Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind.

**Hazardous Combustion Products:** Toxic gases may be formed in a fire situation. Carbon monoxide and other asphyxiates may form as well.

**Unusual Fire and Explosion Hazards:** Closed containers may explode from vapor expansion in high heat.

SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

**Environmental Precautions:** Do not allow spilled product to enter sewers or waterways.

**Methods for Containment:** Contain spilled product by diking area with sand or earth.

**Methods for Clean-up:** Cover contained spill with an inert absorbent material such as sand, vermiculite or other appropriate material. Vacuum, scoop, or sweep up material and place in a container for disposal. Do not place spilled material back in original container.

**Other Information:** None known

SECTION 7: HANDLING AND STORAGE

**Handling:** RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the pesticide product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.
Storage: Store in cool, dry areas away from children, food and feed products in an area away from incompatible substances. Protect packaging from physical damage. Protect from exposure to fire. Maintain product above minimum storage temperature. Do not store in aluminum or metal vessels. See pesticide product label for additional storage information.

Minimum Storage Temperature: 32°F

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

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

<table>
<thead>
<tr>
<th>Exposure Guidelines</th>
<th>Component:</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>No components have established limits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE TO END USERS: PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING LISTED IN THIS SECTION IS FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD REFER TO THE PESTICIDE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING.

Respiratory Protection: If conditions are poorly ventilated, use a NIOSH approved air-purifying respirator with cartridges/canisters approved for general particulates.

Engineering Controls: Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

Protective Gloves: Wear chemically protective gloves to prevent exposure to skin.

Eye Protection: To avoid contact with eyes, wear chemical safety goggles or safety glasses and full face shield. Contact lenses are not protective eye devices. An emergency eyewash or water supply should be readily accessible to the work area.

Other Protective Clothing or Equipment: Wear long-sleeve shirt, long pants and shoes plus socks to prevent skin contact.

Work/Hygienic Practices: Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Liquid</th>
<th>Specific Gravity (H_2O=1): 1.085 (typical)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Pressure (mm Hg):</td>
<td>Not determined</td>
<td>Density (lbs/gallon): 9.05 lbs/gallon (typical)</td>
</tr>
<tr>
<td>Vapor Density (Air=1):</td>
<td>Not determined</td>
<td>Melting Point/Freezing Point: Not determined</td>
</tr>
<tr>
<td>Solubility in Water (wt %):</td>
<td>100%</td>
<td>Boiling Point/Range: Not determined</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not determined</td>
<td>pH: 9.0</td>
</tr>
<tr>
<td>Appearance and odor:</td>
<td>Dark greenish blue with ammonia like odor</td>
<td>Flash Point: Not determined</td>
</tr>
</tbody>
</table>

**SECTION 10: STABILITY AND REACTIVITY**

Reactivity: None known

Chemical Stability: Product is stable at ambient temperature and pressure, under normal storage and handling conditions.

Possibility of Hazardous Reactions: Will not occur.

Conditions to Avoid: Avoid excessive heat and freezing temperatures.

Incompatible Materials: None anticipated

Hazardous Decomposition Products: In a fire situation, carbon monoxide and other asphyxiates may form.
### SECTION 11: TOXICOLOGICAL INFORMATION

#### ACUTE TOXICITY
- **Eye Effects:** Causes mild but temporary eye irritation clearing in less than 7 days (rabbit).
- **Skin Effects:** Irritation is not expected however, if irritation occurs it should clear up in less than 72 hours (rabbit). Not a skin sensitizer. LD50 >5050 mg/kg (rabbit).
- **Acute Inhalation Effects:** LC50 >2.81 mg/L (rats); no mortality was observed during the study and based upon component information, it is not anticipated that this product is toxic by inhalation.
- **Acute Oral Effects:** LD50 >5,000 mg/kg (rats)

#### CHRONIC TOXICITY
- **Chronic Effects:** None known
- **Carcinogenicity:** None known
- **Mutagenicity:** None known
- **Teratogenicity:** None known
- **Reproductive Toxicity:** None known

#### POTENTIAL HEALTH EFFECTS:
- **Eyes:** May cause mild but temporary eye irritation clearing in less than 7 days.
- **Skin:** May cause mild but temporary skin irritation with prolonged contact.
- **Inhalation:** May cause mild irritation of the upper respiratory tract.
- **Ingestion:** May cause irritation of the gastric system.

### SECTION 12: ECOLOGICAL INFORMATION

#### ENVIRONMENTAL SUMMARY: Not determined

#### ECOTOXICITY DATA:
- **Fish Acute and Prolonged Toxicity:** Not determined
- **Aquatic Invertebrate Acute Toxicity:** Not determined
- **Aquatic Plant Toxicity:** Not determined
- **Bird Acute and Prolonged Toxicity:** Not determined
- **Honeybee Toxicity:** Not determined

#### ENVIRONMENTAL EFFECTS:
- **Soil Absorption/Mobility:** Not determined
- **Persistence and degradability:** Not determined
- **Bioaccumulative Potential:** Not determined
- **Other adverse effects:** Not determined

### SECTION 13: DISPOSAL CONSIDERATIONS

#### Waste:
Dispose of in accordance with applicable Federal, state and local laws and regulations.

#### Container:
Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations. See pesticide product label for full instructions on disposal.

#### RCRA Characteristics:
It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

### SECTION 14: TRANSPORT INFORMATION

#### DOT: (Ground)
This product is not regulated by the U.S. Department of Transportation as a hazardous material for ground shipment.

#### IMDG: (Sea)
Not determined

#### IATA: (Air)
Not determined

#### TDG: (Canada)
Not determined
SECTION 15: REGULATORY INFORMATION

TSCA Inventory: This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

SARA Title III Information:
- Section 302 - Extremely hazardous substances: None listed
- Section 311/312 – Hazard Categories: Immediate (Acute)
- Section 313 – The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:
  - Copper compounds (3.0 – 5.0%); Manganese compounds (17.0 – 19.0%); Zinc compounds (11.0 – 14.0%)
- CERCLA - This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):
  - Copper compounds, Manganese compounds and Zinc compounds are all considered to be CERCLA hazardous substances though no RQ is established.

EPA Registration Information: This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION
- Causes eye irritation.
- Harmful if absorbed through skin.
- Avoid contact with skin, eyes, or clothing.
- Wash thoroughly with soap and water after handling.
- Remove and wash contaminated clothing before reuse. Wear the appropriate Personal Protective Equipment (PPE).

California Proposition 65: This product does not contain any components known to the state of California to cause cancer and/or reproductive harm.

U.S. State Worker and Community Right-To-Know (RTK) Information (CT, IL, MA, MN, NH, NJ, PA, RI):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>State(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinetin</td>
<td>525-79-1</td>
<td>NJ, PA</td>
</tr>
<tr>
<td>Copper citrate (copper compounds)</td>
<td>14025-15-1</td>
<td>NJ, PA</td>
</tr>
<tr>
<td>Manganese citrate (manganese compounds)</td>
<td>15375-84-5</td>
<td>IL, MN, NJ, RI</td>
</tr>
<tr>
<td>Zinc citrate (zinc compounds)</td>
<td>14025-21-9</td>
<td>IL, NJ</td>
</tr>
</tbody>
</table>

Canadian Domestic Substances List: Not determined

WHMIS Classification: This product is not approved for use in Canada. WHMIS classification is not determined.

SECTION 16: OTHER

Disclaimer: The information presented herein is based on available data from reliable sources and is correct to the best of WinField Solutions’ knowledge. WinField Solutions, LLC makes no warranty, express nor implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

Revision Date: December 13, 2013
Supersedes document dated: February 13, 2013
Sections Revised: All