

# MATERIAL SAFETY DATA SHEET

## SECTION 1. PRODUCT AND COMPANY INFORMATION

**Trade Name (as labeled):** Thrive 10-16-38  
Water Soluble Fertilizer Concentrate  
Thrive 10-16-38 w/micronutrients

**Manufactured By:** Moore Agricultural Products Company, Inc.  
11521 Excelsior Avenue  
Hanford, California 93230

**Business Phone:** (559) 583-8115

**Emergency Phone:** INFOTRAC – (800) 535-5053

**Date of Preparation:** June, 2006

**Revision Date:** April, 2008

## SECTION 2. COMPOSITION AND INFORMATION ON INGREDIENTS

| Chemical Name  | CAS # | Exposure Limits In Air |                |
|--|-------|------------------------|----------------|
|  |       | ACGIH TVL (ppm)        | OSHA PEL (ppm) |
| Product is a mixture containing the following items: potassium sulfate 7778-80-5, ammonium phosphate 7722-76-1, potassium phosphate 7778-77-0, potassium nitrate 7757-79-1, sodium molybdate 7631-95-0, sodium borate, 12280-03-4, copper EDTA 14025-15-1, iron EDTA 15708-41-5, manganese EDTA 15375-84-5, zinc EDTA 14025-21-9 |       |                        |                |

## SECTION 3. EMERGENCY/HAZARDS OVERVIEW

**Emergency Overview:** Keep out of reach of children. See Health effects below.

**Symptoms Of Over Exposure:**

**Eyes:** May cause slight irritation with prolonged exposure and minor transient corneal injury.

**Skin:** Prolonged or repeated exposure may cause skin irritation.

**Inhalation:** May cause breathing difficulties with prolonged exposure. Remove to fresh air.

**Ingestion:** Possible nausea and vomiting. Ingestion of large amounts can cause irritation of stomach.

**Hazardous Material Information Rating System:**

(0 = least; 1 = slight; 2 = moderate; 3 = high; 4 = extreme)

**Health (blue)** 1

**Flammability (red)** 0

**Reactivity (yellow)** 1

## SECTION 4. FIRST-AID MEASURES

|                           |  |
|---------------------------|--|
| <b><u>If Inhaled:</u></b> | Remove to fresh air. If breathing becomes difficult, contact a |
|---------------------------|--|

|   |  |
|---|--|
|   | medical physician. Give artificial respiration if victim is not breathing and obtain immediate medical attention.  |
| <b><u>If Ingested:</u></b>  | Call physician or Poison Control Center immediately for most current information. Do not induce vomiting unless directed to do so by a medical professional. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. If vomiting occurs, keep head lower than hips to prevent introduction of fluid into the lungs. |
| <b><u>In Case Of Skin Contact:</u></b>  | Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if skin becomes irritated.   |
| <b><u>In Case Of Eye Contact:</u></b>   | Flush immediately with water for at least 15 minutes, lifting the upper and lower eyelids occasionally. Call a physician if eye irritation persists.   |
| Victims of chemical exposure and all rescuers must be taken for medical attention. Take a copy of label and MSDS to physician or health professional with victim. |  |

## SECTION 5. FIRE-FIGHTING MEASURES

|  |   |
|--|---|
| <b>Flash Point:</b>                        | Not Determined  |
| <b>Test Method:</b>                        |   |
| <b>LEL Flammable Limits:</b>               | Not Established   |
| <b>UEL Flammable Limits:</b>               | Not Established   |
| <b>Autoignition Temperature:</b>           | Not Established   |
| <b>Extinguishing Media:</b>                |   |
| <b>Small Fires:</b>                        | Use Water, Do not use dry chemicals or foam, CO <sub>2</sub> may provide limited control.   |
| <b>Large Fires:</b>                        | Flood fire area with water from a distance. Move containers from fire area if you can do so without risk. Do not move cargo or vehicle if cargo has been exposed to heat. |
| <b>Unusual Fire and Explosion Hazards:</b> | This product is a moderate irritant and presents a potential contact hazard to firefighters.  |
| <b>Special Firefighting Procedures:</b>    | Wear positive pressure, self-contained breathing apparatus (SCBA) and goggles. Avoid exposure to smoke or fumes. Contain any liquid runoff.                               |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Spill And Leak Response:** For small or incidental spills, the minimum personal protective equipment should be rubber gloves, rubber apron, and chemical goggles. Comply with all applicable government regulations on spill reporting, handling, and waste disposal.

## SECTION 7. STORAGE AND HANDLING

|                                   |  |
|-----------------------------------|--|
| <b><u>Storage Practices:</u></b>  | Store this product in a cool, dry place, away from sources of high heat. Do not store product in direct sunlight. Protect bags or other containers from damage. Keep bags or other containers closed when not in use. Keep away from children, feed and food products. |
| <b><u>Handling Practices:</u></b> | Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Wash with soap and water after handling.  |

**Work/Hygiene Practices:** Avoid getting chemicals ON YOU or IN YOU. Wash hands with soap and water after handling chemicals. Do not eat or drink around or while handling chemicals.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Ventilation/Engineering Controls:** Use with adequate ventilation.

**Respiratory Protection:** If work conditions generate vapors or mist, wear a NIOSH approved respirator appropriate for those emission levels. Appropriate respirator may be a full facepiece respirator, a self-contained breathing apparatus in the pressure demand mode, or a supplied-air respirator.

**Eye Protection:** Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, contact lenses should not be worn when working with chemicals because they contribute to the severity of an eye injury.

**Hand Protection:** Rubber gloves with gauntlets.

**Body Protection:** Use body protection appropriate for task. Chemical-resistant coveralls and rubber aprons are generally acceptable.

**Other Protective Measures:** An eyewash and safety shower should be nearby and ready for use.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                |   |                                   |                    |
|--------------------------------|---|-----------------------------------|--------------------|
| <b>Physical State:</b>         | Small granule or powder   | <b>Specific Gravity (water=1)</b> | 50 to 65 # Cu. Ft. |
| <b>Vapor Pressure (mm Hg.)</b> | N/A   | <b>Freezing Point</b>             | N/A                |
| <b>Vapor Density (AIR=1)</b>   | N/A   | <b>Boiling Point</b>              | N/A                |
| <b>Solubility in Water:</b>    | 100%  | <b>pH (10% solution)</b>          | 5.5                |
| <b>Appearance and Odor:</b>    | Fine granular or powder, green-blue crystals with fertilizer like odor. |                                   |                    |

## SECTION 10. STABILITY AND REACTIVITY

**Stability:** Product stable under normal conditions of use and storage.

**Conditions To Avoid:** Extreme heat and damp areas

**Incompatibility:** None Known

**Hazardous Polymerization:** Will not occur

**Hazardous Decomposition Products:** Oxides of nitrogen, sulfur and other toxic fume chemicals may be formed in a fire situation, carbon monoxide and other asphyxiates may form as well.

## SECTION 11. TOXICOLOGICAL INFORMATION

**Toxicity Data:** Not Available

**Acute Effects:**

**Eyes:** Mild irritant. May cause redness and/or burning.

**Skin:** Mild irritant, especially with prolonged exposure. May cause skin ulceration.

**Ingestion:** May cause stomach cramps and/or nausea.

**Inhalation:** Mild irritation of nose and throat. May cause dry coughing, wheezing, or chest tightness.

**Chronic Effects:** Under some circumstances, methemoglobinemia occurs in individuals when the nitrate is converted by bacteria in the stomach to nitrite. Nausea, vomiting, dizziness, rapid heart beat, irregular breathing, convulsions, coma and death can occur should this conversion take place. Chronic exposure to nitrites may cause anemia and adverse effects to kidneys.

## SECTION 12. ECOLOGICAL INFORMATION

Product is a fertilizer and mobile.

### **SECTION 13. DISPOSAL CONSIDERATIONS**

Dispose of product according to federal, state, and local regulations.

### **SECTION 14. TRANSPORTATION INFORMATION**

Nitrates, Inorganic N.O.S, UN1477, PG III, ERG 140

### **SECTION 15. REGULATORY INFORMATION**

**SARA Reporting Requirements:** This material does not contain toxic chemicals subject to the reporting requirements of Section 313, Title III of the Superfund Amendments and Reauthorization Act of 1986.

### **SECTION 16. OTHER INFORMATION**

The information and recommendations herein are taken from data contained in independent, industry recognized references including NIOSH, OSHA, ANSI, and NFPA. This information is, as of date listed above, true and accurate to the best of Moore Agricultural Products Company knowledge. It is intended for use by persons possessing technical knowledge and at their own discretion and risk. Since actual use is beyond our control, no guarantee, express or implied, and no liability is assumed by Moore Agricultural Products Company, Inc. in conjunction with the use of this information. Actual conditions of use and handling may require consideration of information other than, or in addition to, that which is provided herein.