

Material Safety Data Sheet
J. R. Simplot Company
AgriBusiness

Trade Name: Nutrisphere-N® Quick Dry
Registration No: None

M77653

SECTION 1

CHEMICAL PRODUCT AND COMPANY INFORMATION

| | | | |
|------------------------------------|---|-----------------------|--------------------------|
| Manufacturer or Formulator: | J.R. Simplot Company P.O. Box 70013 Boise, ID 83707 | Product Name: | Nutrisphere-N® Quick Dry |
| Emergency Phone - Chemtrec: | 1-800-424-9300 | Common Name: | Nutrisphere-N® Quick Dry |
| | | Chemical Type: | Carboxylated polymer |

SECTION 2

COMPOSITION INFORMATION

| Chemical Name and Synonyms | C.A.S. No. | Chemical Formula | WT% Hazardous | TLV | PEL |
|--|------------|------------------|------------------|--------------|-------------|
| NONE | | | Non Hazardous | | |
| This product is a blend of the following non-hazardous ingredients | | | 100% | | |
| maleic-itaconic copolymer | | | 30% min | | |
| methanol | 67-56-1 | | 25-35% | STEL 250 ppm | TWA 200 ppm |
| propylene glycol | 57-55-6 | | 5-15% | | |
| polyvinyl alcohol | 9002-89-5 | | 2-5% | | |
| boric acid | 10043-35-3 | | 2-4% | | |
| dipropylene glycol | 25265-71-8 | | 0-2% | | |
| neopentyl glycol | 126-30-7 | | 0-2% | | |

SECTION 3

HAZARDS IDENTIFICATION

Ingestion: Methanol: Toxic by inhalation, ingestion and skin absorption. Target organs for methanol: eyes, kidneys, liver, heart, central nervous system, skin.

Inhalation: May cause sore throat, vomiting, and diarrhea. Inhalation and ingestion hazards of product and/or dried dust at very high doses (not normally expected): May cause difficulty breathing, lung edema, damage to the mucous membranes and upper respiratory tract. At very high ingested doses of dried material, may cause burns of the mouth, throat, and stomach, circulatory collapse with clammy skin, weak and rapid pulse, shallow respirations, and scanty urine may follow. Circulatory shock may occur and cause death.

Eye Contact: May cause blurred vision, redness, pain and burns to eye tissue. High doses can cause blindness.

Skin Absorption: Methanol: Toxic by inhalation, ingestion and skin absorption. Target organs for methanol: eyes, kidneys, liver, heart, central nervous system, skin.

Skin Contact: Methanol: Toxic by inhalation, ingestion and skin absorption. Target organs for methanol: eyes, kidneys, liver, heart, central nervous system, skin.

Effects of Overdose: Chronic ingestion exposure hazards related to boric acid content of product: At high doses may result in anorexia, weight loss, vomiting, diarrhea, skin rash, convulsions, anemia, alopecia, conjunctivitis and edema.

SECTION 4

FIRST AID MEASURES

Ingestion: If swallowed, wash out mouth with water, provided person is conscious. Call a physician, hospital emergency room or poison control center immediately; give copy of MSDS information to treating physician. Induce vomiting if directed to do so by physician. Do not give anything by mouth to unconscious person.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing difficult, give oxygen. Seek medical attention if condition persists.

Eyes: Flush eyes with running water for at least 15 minutes. Seek medical attention if condition persists.

Skin: In case of skin contact, immediately wash skin with soap and copious amounts of water. Seek medical attention if irritation persists.

Notes: In all cases of exposure, obtain prompt medical attention. This is due to methanol and boric acid content of the product. In all cases, give copy of MSDS information to treating physician.

SECTION 5

FIRE FIGHTING MEASURES

Extinguishing Media: Water spray, fog, carbon dioxide, dry chemical powder or appropriate foam.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Fire control water needs proper disposal due to methanol content. Vapor may travel to source of ignition and flash back. Container may explode if sufficiently heated by fire. Vapors may explode. Upper explosion limit in air: 36%, lower explosion limit in air: 6% (for methanol). Runoff to sewer may create explosion hazard.

Unusual Fire and Explosion Hazards: May emit toxic fumes under fire conditions.

SECTION 6

ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled: Wear suitable respirator, chemical safety goggles, rubber boots, heavy rubber gloves for minor spills. Isolate hazard area. Stay upwind and out of low-lying areas due to methanol vapors. Positive-pressure self-contained breathing apparatus and chemical protective clothing are required for personnel involved in cleanup with no fire. Spilled material should be contained, and then carefully collected for proper disposal. Do not allow concentrated material to enter soil, drinking water supply, or surface water. Ventilate area and wash spill site after material pickup is complete. Material is slippery and/or sticky when wet and can dry to a slowly-soluble slippery film. During drying methanol vapor is given off. Do not breathe vapors, mist, dust or gas. Do not flush to sewer.

SECTION 7

HANDLING AND STORAGE

Precautions to be taken in handling and storing: Store in a cool dry place away from direct sunlight. Keep tightly sealed. Product dries rapidly to form a film. Clean up spills promptly. Avoid skin and eye contact, do not ingest. Do not breathe vapors, mist, dust or gas. No smoking. Keep away from all ignition sources and electrostatic discharges.

Trade Name: Nutrisphere-N® Quick Dry
Registration No: None

M77653

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation Protection: Mechanical exhaust is required if using in confined space/area
Respiratory Protection: Use appropriate respiratory protection when vapor is generated. Depending on situation, this may be full-face air-purifying respirator with suitable cartridges, or full-face supplied air respirator.
Protective Clothing: Use compatible chemical-resistant gloves.
Eye Protection: Use chemical safety goggles/face shield (eye irritant). Safety shower and eyebath need to be accessible.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|--|
| Boiling Point: 65 C (initial) | Solubility in Water: Water soluble |
| Specific Gravity: 1.1 | % Volatiles (by volume): Not applicable |
| Flashpoint: at or above 73 degrees F | Vapor Pressure, mm Hg: Not applicable |
| pH: 1-2 | Reaction with Water: None |
| Appearance: Light amber liquid with characteristic light odor. | Extinguishing Media: Use media suitable to extinguish source of fire. |

SECTION 10 STABILITY AND REACTIVITY

Stability (Normal Conditions): stable at room temperature and pressure
Conditions to Avoid: May form explosive mixtures with air. Avoid static discharges. Will produce flammable methanol vapor when heated to/above boiling point due to contamination.
Incompatibility (Material to Avoid): Strong oxidizing agents, strong reducing agents, materials incompatible with water, materials incompatible with calcium salts, materials incompatible with carboxylates, materials incompatible with methanol, materials incompatible with polyvinyl alcohol, materials incompatible with boric acid materials incompatible with glycols. Can react with metals to give off hydrogen, heat and/or steam. Can react with bases, hydroxides and metal oxides with high evolution of heat and/or steam. Can react with carbonates to give off carbon dioxide, heat and/or steam.
Hazardous Decomposition Products: It is believed that carbon dioxide and/or monoxide may be generated by high-temperature decomposition.
Hazardous Polymerization: Will not occur

SECTION 11 TOXICOLOGY

Acute effects related to methanol content: Causes eye and skin irritation. Irritating to mucous membranes and upper respiratory tract. May cause headaches, drowsiness, dizziness, nausea, vomiting. At high doses, may cause visual disturbances, optic nerve damage and blindness, convulsions, circulatory collapse, respiratory fatigue, kidney impairment and death. May be absorbed through the skin. Target organs: Central nervous system, skin, eyes, digestive tract. The product should be treated like methanol during use; however, hazards related to methanol content do not persist after application to granular fertilizer.
Effects related to boric acid content: Causes irritation to skin, eyes and respiratory tract. Inhalation and ingestion hazards of product and/or dried dust at very high doses (not normally expected): May cause difficulty breathing, lung edema, damage to the mucous membranes and upper respiratory tract. At very high ingested doses of dried material, may cause burns of the mouth, throat, and stomach, circulatory collapse with clammy skin, weak and rapid pulse, shallow respirations, and scanty urine may follow. Circulatory shock may occur and cause death. May cause sore throat, vomiting, and diarrhea. Affects central nervous system, liver and kidneys. Chronic exposure to high ingested doses may impair fertility and/or cause harm to the unborn child, may result in anorexia, weight loss, vomiting, diarrhea, skin rash, convulsions, anemia, alopecia, conjunctivitis and edema.

SECTION 12 ECOLOGICAL INFORMATION

Boric acid content may be toxic to aquatic life at high levels of exposure.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal Procedures: Dispose according to all applicable federal, state and local regulations.

SECTION 14 TRANSPORT INFORMATION

| | |
|---|---|
| Shipping name: UN2924, Flammable Liquid, Corrosive, N.O.S. (methanol, maleic-itaconic acid) 3 (8) PG III | |
| Hazard Class: 3 | C.A.S. Number: See "Ingredients" |
| Reportable Quantity (RQ): | D.O.T. Number: UN2924 |
| Labels Required: | Haz Waste No: |
| Placard: | EPA Regist No: |

SECTION 15 REGULATORY INFORMATION

Carcinogenicity: by IARC? Yes () No (X) by NTP? Yes () No (X)
Not on the 302 list of SARA reportable quantities

SECTION 16 OTHER INFORMATION

| | | | |
|---|-------------------------|--------------|--------------|
| Flash Point (Test Method): Flammable due to methanol content | Flammable Limits | LOWER | UPPER |
| Autoignition Temperature: Not applicable | (% BY VOLUME) | 6% | 36% |
| MSDS Version Number: 1 | | | |

Disclaimer: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. **NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED.** It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.