

# Safety Data Sheet

Issue Date: 20-Mar-2015

Revision Date: 09-Sep-2015

Version 2

## 1. IDENTIFICATION

### Product Identifier

**Product Name** NutriSphere-N® Quick Dry Orange

### Other means of identification

**SDS #** FFN: 04005

**UN/ID No** UN2924

### Recommended use of the chemical and restrictions on use

**Recommended Use** Fertilizer.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Verdesian Life Sciences, U.S., LLC.  
1001 Winstead Drive, Suite 480  
Cary, NC 27513

### Emergency Telephone Number

**Company Phone Number** Business Phone: (800) 868-6446  
Fax Phone: (919) 535-3652  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Dark red as is, very intense orange when diluted

**Physical State** Liquid

**Odor** Characteristic

### Classification

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Vapors)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 1
Flammable Liquids	Category 3

### Signal Word

**Danger**

### Hazard Statements

Toxic if swallowed  
Toxic in contact with skin  
Toxic if inhaled  
Causes severe skin burns and eye damage  
May damage fertility or the unborn child  
Causes damage to organs  
Flammable liquid and vapor

**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Do not breathe dust/fume/gas/mist/vapors/spray  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

**Precautionary Statements - Response**

Immediately call a poison center or doctor/physician  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a poison center or doctor/physician  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
Immediately call a poison center or doctor/physician  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Immediately call a poison center or doctor/physician  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Rinse mouth  
Do not induce vomiting  
IN CASE OF FIRE: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Harmful to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Family** Carboxylated polymer, alcohol polymer, boric acid, D&C dye mixture.

Chemical Name	CAS No	Weight-%
Methanol	67-56-1	Proprietary
Maleic-itaconic copolymer, partial calcium salt	877469-38-0	Proprietary
Propylene Glycol	57-55-6	Proprietary
Polyvinyl alcohol	9002-89-5	Proprietary
Boric Acid	10043-35-3	Proprietary

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

#### First Aid Measures

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye Contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.
<b>Skin Contact</b>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediate medical attention is required.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediate medical attention is required.
<b>Ingestion</b>	Do not induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

#### Most important symptoms and effects

<b>Symptoms</b>	Prolonged breathing of vapors may cause nausea, headache, weakness and/or dizziness. Causes severe skin burns and eye damage. Will cause gastrointestinal tract irritation. Methanol may cause blindness or be fatal if ingested.
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#### Indication of any immediate medical attention and special treatment needed

<b>Notes to Physician</b>	Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Ethanol and fomepizole are effective antidotes for methanol poisoning, although fomepizole is preferred.
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### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Water spray may be ineffective. If water is used, fog nozzles are preferable.

#### Specific Hazards Arising from the Chemical

Flammable liquid and vapor.

**Hazardous Combustion Products** Carbon oxides.

**Sensitivity to Static Discharge** Flammable mixtures of this product are readily ignited even by static discharge.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

<b>Personal Precautions</b>	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). In case of a spill, clear the affected area and protect people. Wear protective clothing as described in Section 8 of this safety data sheet.
<b>For Emergency Responders</b>	Remove all sources of ignition. Full-body chemical protective clothing is recommended for emergency response procedures.
<b>Environmental Precautions</b>	See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

<b>Methods for Containment</b>	For small spills, absorb on polypads or other suitable non-reactive absorbent materials.
<b>Methods for Clean-Up</b>	Use non-sparking hand tools and explosion-proof electrical equipment. Sweep up and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.

**7. HANDLING AND STORAGE****Precautions for safe handling**

<b>Advice on Safe Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only in well-ventilated areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). All equipment used when handling the product must be grounded. Use non-sparking hand tools and explosion-proof electrical equipment. Take precautionary measures against static discharges. Do not breathe dust/fume/gas/mist/vapors/spray.
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**Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from heat, sparks, flame. Keep out of the reach of children. Store locked up.
<b>Incompatible Materials</b>	Strong oxidizing agents, strong reducing agents, materials incompatible with water, materials incompatible with calcium salts, materials incompatible with ammonium salts, materials incompatible with carboxylates. Can react with metals to give off hydrogen, heat and/or steam. Can react with bases and metal oxides with high evolution of heat and/or steam. Can react with carbonates to give off carbon dioxide, heat and/or steam.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methanol 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m <sup>3</sup> (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m <sup>3</sup> (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 250 ppm STEL: 325 mg/m <sup>3</sup>
Boric Acid 10043-35-3	STEL: 6 mg/m <sup>3</sup> inhalable fraction TWA: 2 mg/m <sup>3</sup> inhalable fraction	-	-

### Appropriate engineering controls

**Engineering Controls** Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Maintain eye wash fountain and quick-drench facilities in work area.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Splash goggles or safety glasses.

**Skin and Body Protection** Use body protection appropriate for task. An apron or other impermeable body protection is suggested. Full-body chemical protective clothing is recommended for emergency response procedures. Wear suitable gloves appropriate for the risk of exposure.

**Respiratory Protection** If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29CFR 1910.134), applicable U.S. State regulations, or the Canadian CSA Standard Z94.4-93 and applicable standards of Canadian Provinces. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998).

**General Hygiene Considerations** Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid		
<b>Appearance</b>	Dark red as is, very intense orange when diluted	<b>Odor</b>	Characteristic
<b>Color</b>	Dark red as is, very intense orange when diluted	<b>Odor Threshold</b>	Not determined

### Property

	<b>Note: These physical properties are typical values for this product and not specifications</b>	<b>Remarks</b>	<b>Method</b>
<b>pH</b>	1.0-2.0		
<b>Melting Point/Freezing Point</b>	Not determined		
<b>Boiling Point/Boiling Range</b>	65 °C / 149 °F		
<b>Flash Point</b>	> 23 °C / > 73 °F		
<b>Evaporation Rate</b>	Not determined		

<b>Flammability (Solid, Gas)</b>	Not determined
<b>Upper Flammability Limits</b>	36.0%
<b>Lower Flammability Limit</b>	6.0%
<b>Vapor Pressure</b>	Not determined
<b>Vapor Density</b>	Not determined
<b>Specific Gravity</b>	1.0-1.1
<b>Water Solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	Not determined
<b>Partition Coefficient</b>	Not determined
<b>Auto-ignition Temperature</b>	Not determined
<b>Decomposition Temperature</b>	Not determined
<b>Kinematic Viscosity</b>	Not determined
<b>Dynamic Viscosity</b>	<50 cSt
<b>Explosive Properties</b>	Not determined
<b>Oxidizing Properties</b>	Not determined

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

#### **Hazardous Polymerization**

Hazardous polymerization does not occur.

### Conditions to Avoid

Excessive heat, sparks and flames.

### Incompatible Materials

Strong oxidizing agents, strong reducing agents, materials incompatible with water, materials incompatible with calcium salts, materials incompatible with ammonium salts, materials incompatible with carboxylates. Can react with metals to give off hydrogen, heat and/or steam. Can react with bases 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

Thermal decomposition may produce oxides of carbon.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### **Product Information**

To the best of our knowledge, the chemical, physical and toxicological properties of this material have not been thoroughly investigated. The product should be treated like methanol during use; however, hazards related to methanol content do not persist after application to granular fertilizer.

#### **Eye Contact**

Causes severe eye damage.

#### **Skin Contact**

Toxic in contact with skin. Causes severe skin burns.

#### **Inhalation**

Toxic if inhaled.

#### **Ingestion**

Toxic if swallowed. May cause discomfort if swallowed. May cause drowsiness or dizziness.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methanol 67-56-1	= 6200 mg/kg ( Rat )	= 15800 mg/kg ( Rabbit )	= 22500 ppm ( Rat ) 8 h = 64000 ppm ( Rat ) 4 h
Propylene Glycol 57-55-6	= 20000 mg/kg ( Rat )	= 20800 mg/kg ( Rabbit )	-
Boric Acid 10043-35-3	= 2660 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 0.16 mg/L ( Rat ) 4 h
Polyvinyl alcohol 9002-89-5	> 20 g/kg ( Rat )	-	-

**Information on physical, chemical and toxicological effects****Symptoms**

Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Polyvinyl alcohol 9002-89-5		Group 3		

**Legend***IARC (International Agency for Research on Cancer)**Group 3 IARC components are "not classifiable as human carcinogens"***Reproductive toxicity**

May damage fertility or the unborn child.

**STOT - single exposure**

Causes damage to organs.

**Target organ effects**

Central nervous system (CNS), Skin, Eyes, Digestive system.

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Harmful to aquatic life with long lasting effects.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methanol 67-56-1		28200: 96 h Pimephales promelas mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static		

Propylene Glycol 57-55-6	19000: 96 h Pseudokirchneriella subcapitata mg/L EC50	51400: 96 h Pimephales promelas mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50 51600: 96 h Oncorhynchus mykiss mg/L LC50 static 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static		1000: 48 h Daphnia magna mg/L EC50 Static 10000: 24 h Daphnia magna mg/L EC50
Boric Acid 10043-35-3		1020: 72 h Carassius auratus mg/L LC50 flow-through		115 - 153: 48 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Methanol 67-56-1	-0.77
Boric Acid 10043-35-3	-0.757

**Other Adverse Effects**

Not determined

**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**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**US EPA Waste Number**

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methanol 67-56-1		Included in waste stream: F039		U154

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Methanol 67-56-1	Toxic Ignitable
Boric Acid 10043-35-3	Toxic



## 14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

### DOT

**UN/ID No** UN2924  
**Proper Shipping Name** Flammable liquid, corrosive, n.o.s. (Methanol, Maleic-itaconic acid)  
**Hazard Class** 3  
**Subsidiary Hazard Class** 8  
**Packing Group** III  
**Reportable Quantity (RQ)** 5000 lbs for Methanol

### IATA

**UN/ID No** UN3286  
**Proper Shipping Name** Flammable liquid, toxic, corrosive, n.o.s. (Methanol, Maleic-itaconic acid)  
**Hazard Class** 3  
**Subsidiary Hazard Class** 6.1, 8  
**Packing Group** III

### IMDG

**UN/ID No** UN3286  
**Proper Shipping Name** Flammable liquid, toxic, corrosive, n.o.s. (Methanol, Maleic-itaconic acid)  
**Hazard Class** 3  
**Subsidiary Hazard Class** 6.1, 8  
**Packing Group** III

## 15. REGULATORY INFORMATION

### International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Methanol	Present	X		Present		Present	X	Present	X	X
Maleic-itaconic copolymer, partial calcium salt	Present		X							
Propylene Glycol	Present	X		Present		Present	X	Present	X	X
Polyvinyl alcohol	Present	X				Present	X	Present	X	X
Boric Acid	Present	X		Present		Present	X	Present	X	X

### **Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

*AICS - Australian Inventory of Chemical Substances*

**US Federal Regulations****CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methanol 67-56-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Methanol - 67-56-1	67-56-1	Proprietary	1.0

**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)

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Methanol - 67-56-1	Developmental

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Methanol 67-56-1	X	X	X
Propylene Glycol 57-55-6	X		X

**16. OTHER INFORMATION**

<u><b>NFPA</b></u>	<b>Health Hazards</b> 2	<b>Flammability</b> 3	<b>Instability</b> 0	<b>Special Hazards</b> Not determined
<u><b>HMIS</b></u>	<b>Health Hazards</b> 2	<b>Flammability</b> 3	<b>Physical Hazards</b> 0	<b>Personal Protection</b> B

Issue Date: 20-Mar-2015  
 Revision Date: 09-Sep-2015  
 Revision Note: GHS Compliant

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**