



## Penetrant/Soil Wetting Agent

### PRINCIPAL FUNCTIONING AGENTS:

Polyethylene oxide/polypropylene oxide copolymers .....	25%
Constituents ineffective as a spray adjuvant.....	75%
<b>TOTAL .....</b>	<b>100%</b>

### KEEP OUT OF REACH OF CHILDREN CAUTION

Avoid contact with skin, eyes or clothing. Do not take internally. Wear chemical-resistant eyewear and gloves, long-sleeve shirt and pants and shoes and socks. Do not eat, drink, smoke or chew gum while using this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. In addition, follow precautionary statements on all products used with this material. Clean affected clothing, shoes, and protective equipment before reuse.

#### FIRST AID

**Call a poison control center or doctor immediately for treatment advice. Have the product container with you when calling a poison control center or doctor, or going for treatment.**

**If Swallowed:** Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

**If Inhaled:** 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.

**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 eye.

#### GENERAL INFORMATION

Unpredictable precipitation and expensive irrigation systems can be utilized more effectively and economically with **OptiWet Hydrate**, a soil wetting agent which facilitates the infiltration of moisture into water resistant and compacted soils.

**OptiWet Hydrate** is useful in restoring soil permeability and nutrient availability to areas where intensively managed turf and specialty plant care regimes have altered soil texture and limited water percolation through the soil profile. With regular use, **OptiWet Hydrate** will help to prevent hydrophobic soil development, decrease run-off, encourage bulkier root mass, and manage irrigation water more efficiently. After application, manual watering will be faster and more cost effective.

#### NET CONTENTS:

#### DIRECTIONS FOR USE

**OptiWet Hydrate** is non-phytotoxic and will not burn when used as directed. For maximum effectiveness, apply before precipitation or conventional irrigation to move product into the soil quickly.

For best results, inject or apply **OptiWet Hydrate** at the rates shown below on a weekly basis before signs of stress appear.

#### APPLICATION RATES

<b>Direct injection into pressurized irrigation systems</b>	1.5 to 3 pints or 24 to 48 ounces per acre
<b>Conventional sprayers</b>	1.5 to 3 pints or 24 to 48 ounces per acre
<b>Transplants</b>	1.5 pints or 24 ounces per 1,000 gallons transplant water

#### STORAGE AND DISPOSAL

**Storage:** Store in a cool, dry place. Store in original container only. Do not add anything to the container. Keep container tightly sealed when not in use. Do not store near fire, flame or other potential sources of ignition. Do not contaminate water, food or feed by storage or disposal of this product.

**Disposal:** Do not reuse empty container. Triple rinse (or equivalent) during mixing and loading. Recycling decontaminated containers is the best option of container disposal if allowed by law. Decontaminated containers and materials must be disposed of in a manner allowed by local, state and federal laws and regulations.

**WARRANTY:** Seller warrants that this product consists of the ingredients specified and is reasonably made for the purpose stated on this label when used in accordance with directions under normal conditions of use. No one other than Seller is authorized to make any warranty, guarantee or direction concerning this product. Because the time, place, rate of application and other conditions of use are beyond the Seller's control, Seller's liability from handling, storage and use of the product is limited to replacement of product or refund of purchase price.



2328 E. Lincoln Hwy. #320 • New Lenox, IL 60451

# MATERIAL SAFETY DATA SHEET

OptiWet Hydrate

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION** PRODUCT NAME: OptiWet

**MSDS DATE: 1/8/13 SUPERSEDES: 9/5/12**

**MANUFACTURED FOR: ADDRESS:**

Advantage Systems  
2328 E. Lincoln Hwy. #320 • New Lenox, IL 60451

**CHEMTREC (OR EMERGENCY) PHONE:**

US: 1-800-424-9300

International: 1-202-483-7616

**CHEMICAL NAME: CHEMICAL FAMILY: CHEMICAL FORMULA:**

**PRODUCT USE:**

**SECTION 1 NOTES:**

**SECTION 2: HAZARDOUS INGREDIENTS**

**INGREDIENT CAS NO. % WT/% VOL**

Proprietary mixture Nonionic copolymer Mixture

Soil wetting agent None

**SARA 313 REPORTABLE**

**TWA**

**OSHA**

**STEL Ceiling**

**ACGIH**

**TWA STEL Ceiling**

1 ppm

Ethylene oxide 75-21-8 <1 ppm

**SECTION 2 NOTES:** Product does NOT contain any pesticides or pest control agents \*See section 15 **SECTION 3: HAZARDS IDENTIFICATION**

**ROUTES OF ENTRY:** Eyes, skin, ingestion, inhalation

**POTENTIAL HEALTH EFFECTS**

No

May cause temporary redness and/or irritation. May cause temporary redness and/or irritation. Ingestion may result in diarrhea or weakness. Mists may cause upper respiratory tract irritation. None known beyond above

1 ppm

5ppm/15min

**EYES:**

**SKIN: INGESTION: INHALATION:**

**ACUTE HEALTH HAZARDS:**

**CHRONIC HEALTH HAZARDS:** None known

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** None known

**CARCINOGENICITY**

**OSHA:** No **ACGIH:** No **NTP:** No **IARC:**

**SECTION 3 NOTES:** None

No **OTHER:** See section 15, State Regulations

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## **MATERIAL SAFETY DATA SHEET MSDS DATE: 1/8/13**

OptiWet **SUPERSEDES: 9/5/12**

### **SECTION 4: FIRST AID MEASURES**

**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 eye. Have the product container with you when calling a poison control center or doctor, or going for treatment.

**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

**If Swallowed:** Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If Inhaled:** 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.  
**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** Product does NOT contain a pesticide or pest control product.

**SECTION 4 NOTES:** None

### **SECTION 5: FIRE-FIGHTING MEASURES**

**FLAMMABLE LIMITS IN AIR, UPPER:** Unknown (% BY VOLUME) **LOWER:** Unknown

**FLASH POINT:**

**METHOD USED:**

**AUTOIGNITION TEMPERATURE:**

**NFPA HAZARD CLASSIFICATION**

**HEALTH: 1 FLAMMABILITY:**

**HMS HAZARD CLASSIFICATION**

**HEALTH: 1 FLAMMABILITY:**

**EXTINGUISHING MEDIA:**

**SPECIAL FIRE FIGHTING PROCEDURES:**

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

**HAZARDOUS DECOMPOSITION PRODUCTS:**

**SECTION 5 NOTES:**

**F:** >200 **C:** >93

PMCC Unknown

**F: C:**

**1 REACTIVITY: 0 1 REACTIVITY: 0**

**OTHER: -**

**PROTECTION: B**

Water, carbon dioxide, dry chemical or foam

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

None known Oxides of carbon None

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**ACCIDENTAL RELEASE MEASURES:** Absorb with an inert absorbent. Sweep up and place in an appropriate closed container. Clean up

residual material by washing area with water. Collect washings for disposal. **SECTION 6**

**NOTES:** None

## **SECTION 7: HANDLING AND STORAGE**

**HANDLING AND STORAGE:**

Keep container tightly closed. Store in original container only. Do not add water to the contents of this

container. Triple rinse container, empty rinse water into spray or stock tank. Dispose of empty containers in

accordance with federal, state, and local law. **SECTION 7 NOTES:** None

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**MATERIAL SAFETY DATA SHEET** MSDS DATE: 1/8/13  
OptiWet **SUPERSEDES:** 9/5/12

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

**VENTILATION :**

**RESPIRATORY PROTECTION:**

Local exhaust ventilation recommended if generating vapor, dust, or mist. If exhaust ventilation is not available or inadequate, use MSHA or NIOSH approved respirator as appropriate.

Not necessary unless ventilation is inadequate. Then use MSHA or NIOSH approved respirator, as appropriate.

**APPEARANCE: ODOR:**  
**PHYSICAL STATE:**

**pH AS SUPPLIED: pH (Other): BOILING POINT:**

**F:**

**C: MELTING POINT:**

**F:**

**C: FREEZING POINT:**

**F:**

**C:**  
**VAPOR PRESSURE (mmHg):**

**@**  
**F:**

**C:**  
**VAPOR DENSITY (AIR = 1):**

**@**  
**F:**

**C:**  
**SPECIFIC GRAVITY (H<sub>2</sub>O = 1):**

@  
F: 68

**C: 20 EVAPORATION RATE:**

**BASIS (butyl acetate=1):**

**SOLUBILITY IN WATER:**

Clear to hazy viscous liquid Mild odor  
Liquid  
3.4

Unknown

Unknown Unknown

Unknown Unknown

Unknown Unknown Unknown

Unknown

~1.0

Unknown

Soluble Unknown

None

**VISCOSITY: @**

**F: C:**

**SECTION 9 NOTES:**

Chemical splash goggles.  
Impermeable gloves, long sleeves, long pants, rubber apron

**EYE PROTECTION:**

**SKIN PROTECTION:**

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Eye wash stations, safety showers

**WORK HYGIENIC PRACTICES:**

**EXPOSURE GUIDELINES:**

**SECTION 8 NOTES:**

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse.

None known None

# MATERIAL SAFETY DATA SHEET

OptiWet

## SECTION 10: STABILITY AND REACTIVITY

**STABILITY:** Stable  Unstable

**CONDITIONS TO AVOID (STABILITY):** None known

**INCOMPATIBILITY (MATERIAL TO AVOID):** None known

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Under fire conditions, oxides of carbon

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID (POLYMERIZATION):** None known

**SECTION 10 NOTES:** None

## SECTION 11: TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL INFORMATION:** Not available

**SECTION 11 NOTES:** None

## SECTION 12: ECOLOGICAL INFORMATION

**ECOLOGICAL INFORMATION:** Not available

**SECTION 12 NOTES:** None

## SECTION 13: DISPOSAL CONSIDERATIONS

**MSDS DATE:1/8/13 SUPERSEDES: 9/5/12**

**WASTE DISPOSAL METHOD:**

**RCRA HAZARD CLASS:**

**SECTION 13 NOTES:**

**SECTION 14: TRANSPORT INFORMATION U.S. DEPARTMENT OF TRANSPORTATION**

Material may be landfilled or burned if allowed by law. Stay out of smoke. Dispose of properly according to all laws and regulations

Not regulated None

**PROPER SHIPPING NAME: HAZARD CLASS:**

**ID NUMBER:**

**PACKING GROUP:**

**LABEL STATEMENT: SECTION 14 NOTES:**

Not regulated Not regulated Not regulated Not regulated Not regulated

None

**MATERIAL SAFETY DATA SHEET MSDS DATE:1/8/13**

OptiWet **SUPERSEDES: 9/5/12**

## **SECTION 15: REGULATORY INFORMATION**

### **U.S. FEDERAL REGULATIONS**

**TSCA (TOXIC SUBSTANCE CONTROL ACT):** All components of this product are listed or excluded from listing on the US Toxic

Substance Control Act (TSCA) Chemical Substance Inventory.

### **CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):**

Chemical Name CAS Number Range in % RQ

Residual ethylene oxide (typical) 75-21-8

### **SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):**

#### **Section 302/304 Extremely Hazardous Substances**

Chemical Name CAS Number Residual ethylene oxide (typical) 75-21-8

#### **311/312 HAZARD CATEGORIES:**

<0.001 10

Range in % TPQ RQ

<0.001 Below reportable concentrations

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard

#### **313 REPORTABLE INGREDIENTS:**

This product contains no substances subject to the reporting requirements of Section 313 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) or 40 CFR Part 372 in concentrations above the de minimis concentration level.

#### **STATE REGULATIONS:**

**WARNING!** This product contains a detectable amount of ethylene oxide, which is known to the State of California to cause cancer and/or reproductive toxicity.

Ethoxylated products may contain residual amounts of ethylene oxide (EO) which can accumulate in the container headspace and be released into the ambient environment. This process is enhanced when the product is agitated, as during tank car loading and unloading, and blending operations. Ethylene oxide causes tumors in laboratory animals. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Level (PEL) for EO is 1 ppm for an eight-hour time weighted average exposure. The standard regulates occupational exposure to EO from all sources, including products containing residual EO. It is the responsibility of the employer to comply with OSHA ethylene oxide standard (29) CFR 1910.1047).

**SECTION 15 NOTES:** None **SECTION 16: OTHER INFORMATION**



**OTHER INFORMATION:** None

**PREPARATION INFORMATION:** Prepared on 1/8/13

**DISCLAIMER:**

The recommendation for safe handling and protection procedures is believed to be generally suitable for the standard uses of this compound. However, each user should identify his intended uses of this material and determine whether they are appropriate. All data included in this document is released as typical values and should not be utilized to determine the suitability of this material for a particular use or purpose. No warranty, either expressed or implied, is hereby made, nor do we give permission, inducement, or recommendations to practice any patented invention without a license. All data is offered for consideration, investigation and verification purposes only.

**Advantage Systems**

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