

Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name: HYDRATE
Product Code: PRI/HYDRATE
Effective Date: January 21, 2009

Manufactured for: PrimeraTurf Inc.
PO Box 39418
North Ridgeville, OH 44039
Information Phone: (440) 748-0177
Emergency Phone: Chemtrec (800) 424-9300 or 703 527 3887 (international)

Hazardous Material Information System:

Health	2*
Flammability	2
Physical Hazard	1
Personal Protection	C

Section 2. Ingredients and Hazards Identification

Emergency Overview: CAUTION! CONTAINS MATERIAL WHICH MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: BLOOD, KIDNEYS, LIVER, RESPIRATORY TRACT.

Potential Acute Health Effects:

Eyes: This product may irritate eyes upon contact.

Skin: This product may irritate skin upon contact.

Inhalation: Inhalation of the spray or mist may produce severe irritation of respiratory tract, characterized by coughing, choking or shortness of breath.

Ingestion: Harmful if swallowed.

Section 3. Composition/Information on Ingredients

Component	CAS Number	Weight Percent
2-Butoxyethanol	111-76-2	36%
Ethoxylated Polyoxypropylene	9003-11-6	>9%

The composition of this material is a trade secret. Contains no other components or impurities which will influence the classification with regard to human and environmental risk assessment.

Section 4. First Aid Measures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Skin Contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing and shoes before reuse.

Inhalation: Move exposed person to fresh air. Keep person warm and at rest. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flammability of Product:	Combustible. Products of combustion are carbon oxides. Lower: 1.1% Upper: 10.6%
Fire Fighting Media:	Foam, alcohol foam, CO ₂ , dry chemical, water fog.
Fire hazards in the presence of:	Open flames, sparks and static discharge and heat. Non-flammable in the presence of the flowing materials or conditions: oxidizing materials, reducing materials, combustible materials and moisture.
Protective Clothing:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental Release Measures

Clean-Up Procedures:	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment including splash goggles, full suit, vapor respirator, boots, and chemically resistant gloves. If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.
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Section 7. Handling and Storage

Handling:	Avoid breathing fumes. General mechanical ventilation can be expected to effectively remove and prevent build up of any vapor or mist generated from handling this product in a closed environment. Protect eyes to prevent contact. Avoid exposure to skin. Wash thoroughly after handling.
Storage:	Keep container in a cool, dry, and well ventilated place inaccessible to children and pets. Keep containers sealed until ready for use.

Section 8. Exposure Control/Personal Protection

Hazardous Components		Occupational Exposure Limits		
Component	CAS Number	OSHA	ACGIH	Weight Percent
2-Butoxyethanol *	111-76-2	TWA: 20 ppm	TWA: 20 ppm	36%
*2-Butoxyethanol (Ethylene Glycol Butyl Ether) is reportable under SARA Title III, Section 313 under the category of "N230 Certain Glycol Ethers" which has a de minimis concentration of 1.0%.				

Engineering controls:	General mechanical ventilation can be expected to effectively remove and prevent build up of any vapor or mist generated from handling this product in a closed environment.
Personal Protection:	
<i>Eyes:</i>	Wear safety glasses with side shields. Wear additional eye protection such as chemical goggles or face shield if splashing or spraying hazard exists. Have an eye wash station available.
<i>Body:</i>	To prevent skin contact wear coveralls, apron, boots, or lab coat. Have a safety shower close to the workstation.
<i>Hands:</i>	Avoid skin contact by using chemically resistant gloves.
<i>Respiratory:</i>	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits or the selected respirator.
Other:	Open wounds or skin surface disruptions should be covered with a chemical resistant patch to minimize absorption risks. Clean clothing should be worn daily to avoid possible long-term build up of the product leading to chronic overexposure.

Section 9. Physical and Chemical Properties

Odor	Characteristic	Vapor Pressure	2.3 kPa (17.2 mm Hg)(at 20°C)
Color	Colorless	Vapor Density	4.1 (Air = 1)
Physical state	Liquid	Evaporation Rate	0.1 compared with Butyl acetate
pH	Neutral	Specific Gravity (H₂O = 1)	0.93 g/mL
Melting/Freezing Point	100°C (212°F)/0°C (32°F)	Solubility	Water soluble

Section 10. Stability and Reactivity

Chemical Stability: This material is chemically stable under normal storage and handling conditions.
Hazardous Will not occur.
Polymerization:
Incompatibility (Materials to Avoid): Reactive or incompatible with the oxidizing materials. Non-reactive or compatible with organic materials, metals and moisture.

Section 11. Toxicological Information

Chronic Toxicity: None known
Mutagenic Effects: Not available
Teratogenic Effects: Not available
Developmental Toxicity: None known
Acute Effects on Humans: Exposure can cause nausea, headache and vomiting. Absorption through skin increases hazard. Hazardous in case of skin contact. Slightly hazardous in case of ingestion.
Carcinogenic Effects: Classified A5 (not suspected for humans) by ACGIH, 4 (probably not for humans) by IARC.
Existing Medical Conditions Aggravated By Exposure: Repeated or prolonged exposure to the substance can produce target organ damage.

Section 12. Ecological Information

Products of degradation: These products are carbon oxides and water.
Toxicity of the products of biodegradation: The product itself and its products of degradation are not toxic.

Section 13. Disposal Considerations

Waste disposal: The generation of waste should be avoided or minimized whenever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Section 14. Transport Information

UN number NA 1993
Proper shipping name: Combustible Liquids, n.o.s. (2-Butoxyethanol)
Class: Not available
Packing group: III

Section 15. Regulatory Information

US Federal Regulations:

SARA 311/312:

Acute: Yes
Chronic: Yes
Fire: Yes

SARA 313: 2-Butoxyethanol (Ethylene Glycol Butyl Ether) is reportable under SARA Title III, Section 313 under the category of "N230 Certain Glycol Ethers" which has a de minimis concentration of 1.0%.

Regulatory Listings

United States (TSCA): Listed

Section 16. Other Information

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