

**1. Identification**

**Product identifier** NORTH STAR

**Other means of identification**

**Product code** HIL00528

**Recommended use** Floor Finish

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Manufacturer**

**Company name** HILLYARD INDUSTRIES

**Address** 302 North Fourth St.  
 St. Joseph, MO 64501

**Contact person** Regulatory Affairs

**Telephone number** (816) 233-1321 (Ext. 8285)

**Fax** (816) 383-8485

**E-mail** regulatoryaffairs@hillyard.com

**Emergency telephone #** (800) 424-9300  
 (Only in the event of chemical emergency involving a spill, leak, fire, exposure, or accident involving chemicals.)

**2. Hazard(s) identification**

**Physical hazards** Not classified.

**Health hazards** Not classified.

**Environmental hazards** Hazardous to the aquatic environment, acute Category 3 hazard

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** Harmful to aquatic life.

**Precautionary statement**

**Prevention** Avoid release to the environment.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law in compliance with applicable federal, state and local requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

**3. Composition/information on ingredients**

**Mixtures**

Chemical name	Common name and synonyms	CAS number	%
2-(2-ethoxyethoxy)ethanol		111-90-0	5 - < 10
Tributoxyethyl Phosphate		78-51-3	1 - < 3
Other components below reportable levels			90 - 100

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Continue rinsing.
<b>Ingestion</b>	Drink water as a precaution. Get medical attention if any discomfort continues.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Follow precautions for safe handling described in this safety data sheet. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	<p>This product is miscible in water.</p> <p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p>
<b>Environmental precautions</b>	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
2-(2-ethoxyethoxy)ethanol (CAS 111-90-0)	TWA	140 mg/m3  25 ppm

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

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

#### Eye/face protection

Where splashing of concentrate is a concern, use protective glasses with side shield

#### Skin protection

##### Hand protection

For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Thermal hazards

Not applicable.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

Milky solution

#### Physical state

Liquid.

#### Form

Liquid.

#### Color

Milky white

### Odor

Ammonia odor

### Odor threshold

Not available

### pH

8 - 9 Concentrate

### Melting point/freezing point

Not applicable / Not available

### Initial boiling point and boiling range

> 200 °F (> 93.33 °C)

### Flash point

> 200.0 °F (> 93.3 °C) Tag Closed Cup

### Evaporation rate

< 1 (ethyl ether = 1)

### Flammability (solid, gas)

Not available.

### Upper/lower flammability or explosive limits

#### Explosive limit - lower (%)

Not available.

#### Explosive limit - upper (%)

Not available.

### Vapor pressure

17.6 mm Hg

### Vapor density

1.3 (AIR = 1)

### Relative density

1.03 at 77°F

### Solubility(ies)

#### Solubility (water)

100 % Complete

### Partition coefficient (n-octanol/water)

Not available

### Auto-ignition temperature

Not available

### Decomposition temperature

Not available

### Viscosity

Not available.

### Other information

#### Density

8.59 lb/gal

<b>Explosive limit</b>	Not available
<b>Specific gravity</b>	1.03
<b>VOC (Weight %)</b>	CARB COMPLIANT

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	May be irritating to the skin.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

#### Acute toxicity

Product	Species	Test Results
NORTH STAR		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	10340.0195 mg/kg estimated
<i>Inhalation</i>		
LC50	Mouse	54236.6406 mg/l, 10 Minutes estimated 25648.8555 mg/l, 1 Hours estimated 25267.1758 mg/l, 2 Hours estimated
	Rabbit	53816.793 mg/l, 1 Hours estimated
	Rat	58015.2656 mg/l, 2 Hours estimated 38931.2969 mg/l, 1 Hours estimated
<i>Oral</i>		
LD50	Guinea pig	33707.8633 mg/kg estimated
	Mouse	110.4027 g/kg estimated
	Rabbit	60738.2539 mg/kg estimated
	Rat	23603.0645 mg/kg estimated

#### Components

Components	Species	Test Results
2-(2-ethoxyethoxy)ethanol (CAS 111-90-0)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	8476 mg/kg
	Rat	6000 mg/kg
<i>Oral</i>		
LD50	Mouse	6.58 g/kg
	Rat	1920 mg/kg

Components	Species	Test Results
Tributoxyethyl Phosphate (CAS 78-51-3)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Guinea pig	3000 mg/kg
	Rat	3000 mg/kg
* Estimates for product may be based on additional component data not shown.		
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>		
Not listed.		
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Prolonged inhalation may be harmful.	
<b>Chronic effects</b>	Prolonged inhalation may be harmful.	

## 12. Ecological information

Product	Species	Test Results
Ecotoxicity Harmful to aquatic life.		
NORTH STAR		
<b>Aquatic</b>		
Fish	LC50	Fish
		349.1889 mg/l, 96 hours estimated
<b>Components</b>		
<b>Species</b>		
<b>Test Results</b>		
2-(2-ethoxyethoxy)ethanol (CAS 111-90-0)		
<b>Aquatic</b>		
Fish	LC50	Bluegill ( <i>Lepomis macrochirus</i> )
		> 10000 mg/l, 96 hours
Tributoxyethyl Phosphate (CAS 78-51-3)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> )
		10.4 - 12 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

2-(2-ethoxyethoxy)ethanol	-0.54
Tributoxyethyl Phosphate	3.75

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

### 15. Regulatory information

<b>US federal regulations</b>	All components are on the U.S. EPA TSCA Inventory List or Exempt. This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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#### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

#### **SARA 304 Emergency release notification**

Not regulated.

#### **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

#### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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#### **SARA 302 Extremely hazardous substance**

Not listed.

<b>SARA 311/312 Hazardous chemical</b>	No
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#### **SARA 313 (TRI reporting)**

Not regulated.

#### **Other federal regulations**

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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#### **US state regulations**

##### **US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

##### **US. Massachusetts RTK - Substance List**

Not regulated.

##### **US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

##### **US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

##### **US. Rhode Island RTK**

Not regulated.

## US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date	01-08-2015
Revision date	01-08-2015
Version #	02
HMIS® ratings	Health: 1 Flammability: 0 Physical hazard: 0

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<b>Revision Information</b>	Toxicological Information: Toxicological Data Regulatory information: US federal regulations HazReg Data: International Inventories
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