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**BULK**

# BARRIER SHEILD™ Safety Data Sheet

## 1. IDENTIFICATION

**Product Name:** BARRIER SHEILD™  
**Product Numbers:** 23001, 23002, 23004, 23005  
**Product Type and Use:** Concrete Repellent  
**Manufacturer:** U.S. Corrosion Technologies, LLC  
2638 National Drive, Garland, TX 75041  
Telephone: 972-271-7361 Fax: 972-278-9721  
**Contact:**  
**Emergency Telephone:** CHEMTREC® USA (800) 424-9300  
Outside US +1 (703) 527-3887

## 2. HAZARDS IDENTIFICATION

### Hazard Classification

#### Health Hazard(s)

Skin Irritation Category 2  
Eye Irritation Category 2A  
STOT-SE Category 3

#### Physical Hazard(s)

None

#### Hazard(s) not otherwise classified

Aspiration Hazard Category 1

### Labeling

**Signal Word:** DANGER  
**Pictograms:** Exclamation Mark, Health Hazard

#### Statements of Hazard

##### Hazard Statements

Causes skin and serious eye irritation  
May cause respiratory irritation  
May be fatal if swallowed and enters airways

##### Precautionary Statements

Store locked up. Wear eye protection and protective gloves. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse. Avoid breathing spray mist. Use only outdoors or in a well-ventilated area. Dispose of contents and container in accordance with applicable regulations.  
If on skin: Wash with plenty of water. If skin irritation or rash occurs: get medical advice.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.  
If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.  
If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a doctor or poison center.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Percent by Wt.
Nonylphenol ethoxylate	9016-45-9	10-15*
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	85-90*

\* Exact percentage of composition has been withheld as a trade secret

## 4. FIRST AID MEASURES

**General Advice:** Causes skin and serious eye irritation. Avoid skin and eye contact. Aspiration hazard; do not swallow. May cause lung damage. Use with adequate ventilation. Avoid breathing spray mist.

**Inhalation:** Remove from exposure area. Remove to fresh air. Get medical attention if discomfort develops and persists.

**Skin Contact:** Wipe excess from skin; remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation persists.

**Eye Contact:** Flush eyes with plenty of water for 15 minutes while holding eyelids open. Seek medical attention if irritation persists.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Immediately call a physician or poison control center.

## 5. FIRE FIGHTING MEASURES

**Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Suitable:** Carbon Dioxide, Dry Chemical, and Foam

**Unsuitable:** Alcohol, Alcohol based solutions, any other media not listed above.

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

**Unusual Fire and Explosion Hazards:** Soaked rags or spill absorbents (i.e. oil dry, polypropylene socks, etc.) can cause spontaneous combustion if stored near combustibles and not handled properly. Store soaked rags or spill absorbents in approved safety containers and dispose of properly. Soaked rags may be washed with soap and water and allowed to dry in well ventilated area.

**Hazardous Combustion/ Decomposition Products:** Oxides of carbon

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions / Protective Equipment / Emergency Procedures:** Use caution as spills may be slippery. Ensure adequate ventilation. Use personal protective equipment.

**Methods and materials for containment and cleaning up:** Do not flush into surface water or sanitary sewer system. Dike and contain spillage. Soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite). Use clean tools to collect absorbed material and transfer to a properly labeled container for disposal according to applicable regulations.

## 7. HANDLING AND STORAGE

### HANDLING

**Precautions for Safe Handling:** Avoid skin and eye contact. Use with adequate ventilation. Avoid breathing mist. Follow all SDS/label precautions even after container is empty due to residue.

### STORAGE

**Conditions to avoid:** Store in a cool, dry, well-ventilated place in the original container. Avoid excess heating, high temperatures, sparks, hot surfaces, open flames and all other sources of ignition.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE LIMITS:** Not established

**Engineering Controls:** Ensure adequate ventilation, especially in confined areas.

### Personal Protection

**Respiratory Protection:** None required under normal use conditions. In case of insufficient ventilation and for exposures above occupational exposure limits wear a NIOSH approved air purifying respirator with organic vapor cartridge.

**Hand / Skin Protection:** Wear impermeable gloves such as neoprene or nitrile rubber gloves. Gauntlets and apron may be worn depending on the extent and duration of exposure.

**Eye / Face Protection:** Safety glasses with side-shields. An eyewash station should be available to the area of use.

**General Hygiene Measures:** Avoid skin and eye contact. Always wash hands and face before eating, drinking or smoking. Remove and wash contaminated clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Transparent	<b>Autoignition Temperature:</b>	261°C / 502°F
<b>Physical State:</b>	Non-viscous liquid	<b>Volatile by volume (%):</b>	2
<b>Odor:</b>	Bland	<b>Vapor Density (Air=1) :</b>	3.9
<b>Color:</b>	Amber	<b>Evaporation Rate (BuAc=1) :</b>	0.2
<b>Viscosity, cSt @ 40°C:</b>	Not established	<b>Vapor Pressure, mmHg @23°C:</b>	<2
<b>cSt @ 104°C:</b>	Not established	<b>Solubility in water:</b>	Emulsifiable
<b>pH:</b>	8.5	<b>Octanol/Water Partition:</b>	
<b>Boiling Point/ Range:</b>	176°C / 349°F	Nonylphenol Ethoxylate	3.7 - 4.5 Est.
<b>Melting Point:</b>	Not established	<b>VOC Content (%):</b>	<2
<b>Flash Point:</b>	>93°C / 200°F	<b>Specific Gravity @ 22.2°C:</b>	0.89
<b>Method:</b>	Tag Closed Cup	<b>Pour Point:</b>	Not established
<b>Lower Explosive Limit, vol %:</b>	Not established	<b>Non-volatile by Volume (%):</b>	98
<b>Upper Explosive Limit, vol %:</b>	Not established	<b>Dielectric Strength (KV):</b>	Not applicable

## 10. STABILITY AND REACTIVITY

**Stability:** Stable at ambient temperatures.

**Conditions to Avoid:** Avoid high temperatures, sparks, open flame, and all other sources of ignition.

**Hazardous Polymerization:** Will not occur.

**Materials to Avoid:** Bases, acids, amines and oxidizing materials.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product Information:** Not established

**Ingredient Information:** Nonylphenol Ethoxylate: Ori-Rat LD50 >960 mg/kg, Skn-Rbt LD50 >1883 mg/kg

### Acute Effects

**Signs and Symptoms of Overexposure:** Skin and Eye Irritation, Coughing, Sneezing

**Inhalation:** Mist may cause respiratory irritation with nasal discomfort and discharge, coughing and sneezing.

**Skin Contact:** May cause irritation seen as itching and redness.

**Eye Contact:** Causes irritation seen as stinging, tearing and redness.

**Ingestion:** May cause nausea, vomiting and diarrhea. Ingestion and subsequent vomiting may result in aspiration of the product into the lungs resulting in chemical pneumonitis, pneumonia and pulmonary edema.

**Primary Route(s) of Exposure:** Eyes, Inhalation

**Primary Route(s) of Entry:** Inhalation, Ingestion

**Target Organs:** Eyes, Skin, Lungs

**Chronic Effects:** In animals, effects have been reported in Kidney and Liver.

**Carcinogenicity:** Components did not cause cancer in laboratory animals.

**Medical Conditions Aggravated by Exposure:** May aggravate existing skin, eye and respiratory conditions such as asthma and dermatitis.

## 12. ECOLOGICAL INFORMATION

**Product Data:** Not established

### Ingredient Data

For Nonylphenol Ethoxylate family of materials

Moderately toxic to fish on an acute basis (LC50 between 1 and 10 mg/L).

Fish Acute & Prolonged Toxicity: LC50, Pimephales promelas (fathead minnow), 96 h: 1.2 - 9.3 mg/l

Aquatic Invertebrate Acute Toxicity: EC50, Daphnia magna (Water flea), 48 h, immobilization: 1.6 - 10 mg/l

Toxicity to Micro-organisms: EC50; Bacteria, 16 h: > 1,000 mg/l

**Persistence and Degradability:** Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

OECD Biodegradation Tests: < 60 % (28 d) OECD 301B Test

Theoretical Oxygen Demand: 2.4 - 2.5 mg/mg

Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Partition coefficient, n-octanol/water (log Pow): 3.7 - 4.5 Estimated.

Bioconcentration Factor (BCF): 7 - 110; Fish; Estimated.

**Elimination Information:** Mobility in soil: No relevant data found.

### 13. DISPOSAL CONSIDERATIONS

**Product:** Dispose of in accordance with applicable regulations.

**Container:** Empty remaining contents. Empty containers should be taken for local recycling, recovery or waste disposal. Empty containers may contain residues. Do not cut, weld or grind empty containers.

### 14. TRANSPORT INFORMATION

**DOT Non-bulk**

Non-Regulated

**DOT Bulk**

**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Technical Name:** Nonylphenol polyethylene glycol ether

**Hazard Class:** 9

**ID Number:** UN3082

**Packing Group:** PG III

**IMDG**

**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Technical Name:** Nonylphenol polyethylene glycol ether

**Hazard Class:** 9

**ID Number:** UN3082

**Packing Group:** PG III

**EMS Number:** F-A,S-F

**Marine pollutant:** Yes

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

**Product Name:** Nonylphenol poly(4+)ethoxylate

**Ship Type:** 2

**Pollution Category:** Y

**ICAO/IATA**

**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Technical Name:** Nonylphenol polyethylene glycol ether

**Hazard Class:** 9

**ID Number:** UN3082

**Packing Group:** PG III

**Cargo Packing Instruction:** 964

**Passenger Packing Instruction:** 964

**Additional Information:** MARINE POLLUTANT

### 15. REGULATORY INFORMATION

**U.S. Federal Regulations**

**Toxic Substances Control Act (TSCA):** All components are included on the Inventory

**Superfund Amendments and Reauthorization Act (SARA) Title III:**

Immediate Hazard	Delayed Hazard	Fire Hazard	Pressure Hazard	Reactivity Hazard
X	-	-	-	-

### 16. OTHER INFORMATION

**Prepared by:** U.S. Corrosion Technologies, LLC Technical Services Department

**Issue Date:** 3/22/2016

**Supersedes Date:** 8/13/2015

**Revision Indicator:** v1.2

National Fire Protection Association (704)

Health: 1

Flammability: 1

Reactivity: 0

Other:

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results and assume no liability for damage incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical and application of such products is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the sole responsibility of the user to comply with all applicable Federal, State and Local Laws and Regulations. Any questions with regards to information contained herein should be referred to: U. S. Corrosion Technologies, LLC (972) 271-7361.