

# Safety Data Sheet



Superior Solutions

Zep, Inc.  
1310 Seaboard Industrial Blvd.  
Atlanta, GA 30318  
1-877-I-BUY-ZEP (428-9937)  
www.zep.com

## Section 1. Chemical Product and Company Identification

**Product name** Heavy Duty Floor Stripper  
**Product use** Floor Stripper  
**Product code** ZULFFS  
**Date of issue** 02/10/12 **Supersedes** 08/15/11

### Emergency Telephone Numbers

#### For MSDS Information:

Compliance Services 1-877-I-BUY-ZEP (428-9937)

#### For Medical Emergency

(877) 541-2016 Toll Free - All Calls Recorded

#### For Transportation Emergency

CHEMTREC: (800) 424-9300 - All Calls Recorded

In the District of Columbia (202) 483-7616

#### Prepared By

Compliance Services  
1420 Seaboard Industrial Blvd.  
Atlanta, GA 30318

## Section 2. Hazards Identification

### Emergency overview

\*Hazard Determination System (HDS): Health, Flammability, Reactivity

**DANGER!**



CAUSES BURNS. HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.

**NOTE:** MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

### Acute Effects

#### Routes of Entry

Dermal contact. Eye contact. Inhalation.

#### Eyes

Causes eye burns. Direct contact with the eyes can cause irreversible damage, including blindness.

#### Skin

Causes skin irritation. Prolonged exposure may result in skin burns and ulcerations. Harmful if absorbed through the skin. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.

#### Inhalation

Avoid breathing vapors, spray or mists. Inhalation of the spray or mist may produce severe irritation of respiratory tract, characterized by coughing, choking or shortness of breath. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.

#### Ingestion

Harmful if swallowed. May cause burns to mouth, throat and stomach. Aspiration hazard if swallowed. Can enter lungs and cause damage.

### Chronic effects

Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Contains material which may cause damage to the following organs: blood, kidneys, liver, central nervous system (CNS).

### Carcinogenicity

No known significant effects or critical hazards.

### Product/ingredient name

Not available.

Additional Information: See Toxicological Information (Section 11)

## Section 3. Composition/Information on Ingredients

### Name of Hazardous Ingredients

### CAS number

### % by Weight

2-butoxyethanol

111-76-2

10 - 20

2-aminoethanol

141-43-5

5 - 15

**Section 4. First Aid Measures**

- Eye Contact** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention immediately.
- Skin Contact** Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.
- Inhalation** Move exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- 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 affected person is conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Section 5. Fire Fighting Measures**

National Fire Protection Association (U.S.A.)



- Flash Point** Closed cup: >93.3°C (>199.9°F) [Tagliabue.]
- Flammable Limits** Not available.
- Flammability** Non-combustible.
- Fire hazard** In a fire or if heated, a pressure increase will occur and the container may burst. May emit toxic fumes under fire conditions.
- Fire-Fighting Procedures** Use an extinguishing agent suitable for the surrounding fire. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment.

**Section 6. Accidental Release Measures**

- Spill Clean up** Eliminate all ignition sources. Put on appropriate personal protective equipment (see section 8). Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Section 7. Handling and Storage**

- Handling** Put on appropriate personal protective equipment (see section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Wash thoroughly after handling.
- Storage** Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Keep out of the reach of children.

**Section 8. Exposure Controls/Personal Protection****Product name**

2-butoxyethanol

**Exposure limits****OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.**

TWA: 25 ppm 8 hour(s).

TWA: 120 mg/m<sup>3</sup> 8 hour(s).**NIOSH REL (United States, 6/2009). Absorbed through skin.**

TWA: 5 ppm 10 hour(s).

TWA: 24 mg/m<sup>3</sup> 10 hour(s).**ACGIH TLV (United States, 2/2010).**

TWA: 20 ppm 8 hour(s).

**OSHA PEL (United States, 6/2010). Absorbed through skin.**

TWA: 50 ppm 8 hour(s).

TWA: 240 mg/m<sup>3</sup> 8 hour(s).

2-aminoethanol

**ACGIH TLV (United States, 2/2010).**

TWA: 3 ppm 8 hour(s).

TWA: 7.5 mg/m<sup>3</sup> 8 hour(s).

STEL: 6 ppm 15 minute(s).

STEL: 15 mg/m<sup>3</sup> 15 minute(s).**OSHA PEL 1989 (United States, 3/1989).**

TWA: 3 ppm 8 hour(s).

TWA: 8 mg/m<sup>3</sup> 8 hour(s).

STEL: 6 ppm 15 minute(s).

STEL: 15 mg/m<sup>3</sup> 15 minute(s).**NIOSH REL (United States, 6/2009).**

TWA: 3 ppm 10 hour(s).

TWA: 8 mg/m<sup>3</sup> 10 hour(s).

STEL: 6 ppm 15 minute(s).

STEL: 15 mg/m<sup>3</sup> 15 minute(s).**OSHA PEL (United States, 6/2010).**

TWA: 3 ppm 8 hour(s).

TWA: 6 mg/m<sup>3</sup> 8 hour(s).**Personal Protective Equipment (PPE)**

- Eyes** Splash goggles.
- Body** Wear appropriate protective clothing to prevent skin contact.  
Recommended: Neoprene gloves. Nitrile gloves. Rubber gloves.  
Synthetic apron.
- Respiratory** Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Wear appropriate respirator when ventilation is inadequate.



### Section 9. Physical and Chemical Properties

<b>Physical State</b>	Liquid.	<b>Color</b>	Clear. Colorless.
<b>pH</b>	11.5 to 12.5	<b>Odor</b>	Solvent-like. Butyl
<b>Boiling Point</b>	>100°C (>212°F)	<b>Vapor Pressure</b>	1.9 kPa (14.5 mm Hg)
<b>Specific Gravity</b>	1	<b>Vapor Density</b>	Not determined.
<b>Solubility</b>	Soluble in the following materials: cold water and hot water.	<b>Evaporation Rate</b>	<1 (Water = 1)
		<b>VOC (Consumer)</b>	24% 1.96 lb/gal 235 g/L

### Section 10. Stability and Reactivity

- Stability and Reactivity** The product is stable.
- Incompatibility** Reactive or incompatible with the following materials: oxidizing materials and acids.
- Hazardous Polymerization** Under normal conditions of storage and use, hazardous polymerization will not occur.
- Hazardous Decomposition Products** carbon oxides (CO, CO<sub>2</sub>)

### Section 11. Toxicological Information

#### Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-aminoethanol	LD50 Oral	Rat	1720 mg/kg	-
2-butoxyethanol	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-

### Section 12. Ecological Information

- Environmental Effects** Not determined.

#### Aquatic Ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
2-aminoethanol	-	Acute EC50 80000 ug/L Fresh water	Algae - Haptophyte - Isochrysis galbana	96 hours
	-	Acute LC50 >100000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon - Adult	48 hours
	-	Acute LC50 150 mg/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - Yolk-sac fry	96 hours
2-butoxyethanol	-	Acute EC50 >1000 mg/L Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
	-	Acute LC50 800000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
	-	Acute LC50 1250000 ug/L Marine water	Fish - Inland silverside - Menidia beryllina - 40 to 100 mm	96 hours

### Section 13. Disposal Considerations

#### Waste Information

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

- Waste Stream** Code: D001  
Classification: Hazardous waste  
Origin: RCRA waste.

### Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
<b>DOT Classification</b>	Not regulated.	-	-	-	
<b>IMDG Class</b>	Not determined.				

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG\* : Packing group

## Section 15. Regulatory Information

### U.S. Federal Regulations

SARA 313 toxic chemical notification and release reporting:

**Product name**

2-butoxyethanol

**Clean Water Act (CWA) 311:** sodium hydroxide; Formaldehyde

**Clean Air Act (CAA) 112 regulated toxic substances:** No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

**United States inventory (TSCA 8b):** All components are listed or exempted.

### State Regulations

**California Prop 65** **WARNING:** This product contains a chemical or chemicals known to the State of California to cause cancer.: Formaldehyde

California prop. 65 (no significant risk level): Formaldehyde

## Section 16. Other Information

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*

*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

\*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.



# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

**Product name** Stain Resistant Floor Sealer  
**Product code** ZUFSLR  
**Date of issue** 02/01/11 **Supersedes**

### Emergency Telephone Numbers

**For MSDS Information:**  
 Compliance Services 404-352-1680

**For Medical Emergency**  
 (877) 541-2016 Toll Free - All Calls Recorded

**For Transportation Emergency**  
 CHEMTREC: (800) 424-9300 - All Calls Recorded  
 In the District of Columbia (202) 483-7616

### Prepared By

Compliance Services  
 1420 Seaboard Industrial Blvd.  
 Atlanta, GA 30318

## Section 2. Hazards Identification

### Emergency overview

**WARNING !**

CAUSES EYE AND SKIN IRRITATION.

\*Hazard Determination System (HDS): Health, Flammability, Reactivity



**NOTE:** MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

### Acute Effects

### Routes of Entry

Dermal contact. Eye contact. Inhalation.

**Eyes** Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

**Skin** Causes skin irritation. Product may be dermal absorbed. Skin inflammation is characterized by itching, scaling, or reddening.

**Inhalation** Avoid inhalation of vapor, spray or mist. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.

**Ingestion** May be harmful if swallowed. Can cause gastrointestinal disturbances.

Contains material which may cause damage to the following organs: kidneys, liver, central nervous system (CNS).

**Carcinogenicity** No known significant effects or critical hazards.

**Additional Information:** See Toxicological Information (Section 11)

## Section 3. Composition/Information on Ingredients

2-(2-ETHOXYETHOXY)-ETHANOL; diethylene glycol monoethyl ether, ethoxydiglycol 111-90-0 1 - 10

## Section 4. First Aid Measures

**Eye Contact** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention immediately.

**Skin Contact** Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops.

**Inhalation** Move exposed person to fresh air. If irritation persists, get medical attention.

**Ingestion** Do not induce vomiting unless directed to do so by medical personnel. If affected person is conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

## Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)



**Flash Point** None.

**Flammable Limits** Not available.

**Flammability** Non-combustible.

**Fire hazard** In a fire or if heated, a pressure increase will occur and the container may burst.

**Fire-Fighting Procedures** Use an extinguishing agent suitable for the surrounding fire.

**Section 6. Accidental Release Measures**

**Spill Clean up** Put on appropriate personal protective equipment (see section 8). Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

**Section 7. Handling and Storage**

**Handling** Put on appropriate personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. Avoid breathing vapors, spray or mists. Do not ingest. Do not reuse container. Observe label precautions. Wash thoroughly after handling.

**Storage** Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

**Section 8. Exposure Controls/Personal Protection****Product name**

2-(2-ETHOXYETHOXY)-ETHANOL; diethylene glycol monoethyl ether, ethoxydiglycol

**Exposure limits**

AIHA WEEL (United States, 1/2009).  
TWA: 25 ppm 8 hour(s).

**Personal Protective Equipment (PPE)**

**Eyes** Safety glasses.



**Body** For prolonged or repeated handling, use the following type of gloves: Neoprene gloves. Nitrile gloves. Rubber gloves.

**Respiratory** Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Wear appropriate respirator when ventilation is inadequate.

**Section 9. Physical and Chemical Properties**

**Physical State** Liquid.

**Color** Milky-white Opaque.

**pH** 8 to 9

**Odor** Characteristic.

**Boiling Point** 100°C (212°F)

**Vapor Pressure** Not determined.

**Specific Gravity** 1.02

**Vapor Density** Not determined.

**Solubility** Soluble in the following materials: cold water and hot water.

**Evaporation Rate** 1 (Water = 1)

**VOC (Consumer)** 0 % (w/w)

**Section 10. Stability and Reactivity**

**Stability and Reactivity** The product is stable.

**Incompatibility** Reactive or incompatible with the following materials: oxidizing materials. Slightly reactive or incompatible with the following materials: acids and alkalis.

**Hazardous Polymerization** Will not occur.

**Hazardous Decomposition Products** carbon oxides (CO, CO<sub>2</sub>)

**Section 11. Toxicological Information****Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
2-(2-ethoxyethoxy)ethanol	LC50 Inhalation Vapor	Rat	>200 mg/L	1 hours
	LC50 Inhalation Vapor	Rat	>5240 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	9143 mg/kg	-
	LD50 Oral	Mouse	6301 mg/kg	-
	LD50 Oral	Rat	10502 mg/kg	-

**Section 12. Ecological Information**

**Environmental Effects** No known significant effects or critical hazards.

**Aquatic Ecotoxicity**

Product/ingredient name	Test	Result	Species	Exposure
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2-(2-ethoxyethoxy)ethanol	-	Acute LC50 20800000 ug/L Fresh water	Fish - Goldfish - Carassius auratus - 0.92 g	96 hours
	-	Acute LC50 15200000 ug/L Fresh water	Fish - Western mosquitofish - Gambusia affinis - 0.23 g	96 hours
	-	Acute LC50 13900000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 1.44 g	96 hours
	-	Acute LC50 >10000000 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 33 to 75 mm	96 hours
	-	Acute LC50 4670000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate - 0 to 24 hours	48 hours

### Section 13. Disposal Considerations

#### Waste Information

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

**Waste Stream** Non-hazardous waste

### Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
<b>DOT Classification</b>	Not regulated.	Not a DOT controlled material (United States).			
<b>TDG Classification</b>	Not regulated.				
<b>IMDG Class</b>	Not determined.				

**NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.**

PG\* : Packing group

### Section 15. Regulatory Information

#### U.S. Federal Regulations

SARA 313 toxic chemical notification and release reporting:

**Product name**

2-(2-ethoxyethoxy)ethanol

**Clean Water Act (CWA) 307:** No products were found.

**Clean Water Act (CWA) 311:** No products were found.

**Clean Air Act (CAA) 112 regulated toxic substances:** 2-(2-ethoxyethoxy)ethanol

All Components of this product are listed or exempt from listing on TSCA Inventory.

**United States inventory (TSCA 8b):** All components are listed or exempted.

#### State Regulations

**California Prop 65**

**WARNING:** This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.: 2-(2-ethoxyethoxy)ethanol

#### Canada

**WHMIS (Canada)**

Class D-2B: Material causing other toxic effects (Toxic).

### Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

\*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.



# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

**Product name** High Traffic Floor Finish  
**Product code** ZUHTFF  
**Date of issue** 02/02/11 **Supersedes**

### Emergency Telephone Numbers

**For MSDS Information:**  
 Compliance Services 404-352-1680

**For Medical Emergency**  
 (877) 541-2016 Toll Free - All Calls Recorded

**For Transportation Emergency**  
 CHEMTREC: (800) 424-9300 - All Calls Recorded  
 In the District of Columbia (202) 483-7616

### Prepared By

Compliance Services  
 1420 Seaboard Industrial Blvd.  
 Atlanta, GA 30318

## Section 2. Hazards Identification

### Emergency overview

**WARNING !**

CAUSES EYE IRRITATION. MAY CAUSE SKIN IRRITATION.

\*Hazard Determination System (HDS): Health, Flammability, Reactivity



**NOTE:** MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

### Acute Effects

### Routes of Entry

Dermal contact. Eye contact. Inhalation.

**Eyes** Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

**Skin** May cause skin irritation. Product may be dermal absorbed. Skin inflammation is characterized by itching, scaling, or reddening.

**Inhalation** Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.

**Ingestion** May be harmful if swallowed.

Contains material which may cause damage to the following organs: kidneys, liver, central nervous system (CNS).

**Carcinogenicity** No known significant effects or critical hazards.

**Additional Information:** See Toxicological Information (Section 11)

## Section 3. Composition/Information on Ingredients

2-(2-ETHOXYETHOXY)-ETHANOL; diethylene glycol monoethyl ether, ethoxydiglycol	111-90-0	1 - 10
TRIBUTOXYETHYL PHOSPHATE; Tris (2-butoxyethyl) phosphate	78-51-3	1 - 5

## Section 4. First Aid Measures

**Eye Contact** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention immediately.

**Skin Contact** Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops.

**Inhalation** Move exposed person to fresh air. If irritation persists, get medical attention.

**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 affected person is conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

## Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)

**Flash Point** None.

**Flammable Limits** Not available.

**Flammability** Non-flammable.

**Fire hazard** In a fire or if heated, a pressure increase will occur and the container may burst.

**Fire-Fighting Procedures** Use an extinguishing agent suitable for the surrounding fire.



**Section 6. Accidental Release Measures**

**Spill Clean up** Put on appropriate personal protective equipment (see section 8). Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

**Section 7. Handling and Storage**

**Handling** Put on appropriate personal protective equipment (see section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Wash thoroughly after handling. Do not reuse container.

**Storage** Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Protect from freezing. Do not store in unlabeled containers. Keep out of the reach of children.

**Section 8. Exposure Controls/Personal Protection****Product name**

2-(2-ETHOXYETHOXY)-ETHANOL; diethylene glycol monoethyl ether, ethoxydiglycol

**Exposure limits**

AIHA WEEL (United States, 1/2009).  
TWA: 25 ppm 8 hour(s).

**Personal Protective Equipment (PPE)**

**Eyes** Safety glasses. 

**Body** Wear appropriate protective clothing to prevent skin contact.  
Recommended: Neoprene gloves. Nitrile gloves. Rubber gloves.

**Respiratory** Use with adequate ventilation. A respirator is not needed under normal and intended conditions of product use.

**Section 9. Physical and Chemical Properties**

**Physical State** Liquid. [Thin liquid] **Color** Milky-white Translucent.

**pH** 8.0 - 9.0 **Odor** Mild. Ammoniacal.

**Boiling Point** 100°C (212°F) **Vapor Pressure** Not determined.

**Specific Gravity** 1.03 **Vapor Density** Not determined.

**Solubility** Easily soluble in the following materials: cold water and hot water. **Evaporation Rate** 1 (Water = 1)

**VOC (Consumer)** 0.9%

**Section 10. Stability and Reactivity**

**Stability and Reactivity** The product is stable.

**Incompatibility** Reactive or incompatible with the following materials: oxidizing materials and acids.

**Hazardous Polymerization** Will not occur.

**Hazardous Decomposition Products** carbon oxides (CO, CO<sub>2</sub>)

**Section 11. Toxicological Information****Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
2-(2-ethoxyethoxy)ethanol	LC50 Inhalation Vapor	Rat	>200 mg/L	1 hours
	LC50 Inhalation Vapor	Rat	>5240 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	9143 mg/kg	-
	LD50 Oral	Mouse	6301 mg/kg	-
	LD50 Oral	Rat	10502 mg/kg	-

**Section 12. Ecological Information**

**Environmental Effects** No known significant effects or critical hazards.

**Aquatic Ecotoxicity**

Product/ingredient name	Test	Result	Species	Exposure
2-(2-ethoxyethoxy)ethanol	-	Acute LC50 20800000 ug/L Fresh water	Fish - Goldfish - Carassius auratus - 0.92 g	96 hours
	-	Acute LC50 15200000 ug/L Fresh water	Fish - Western mosquitofish - Gambusia affinis - 0.23 g	96 hours
	-	Acute LC50 13900000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 1.44 g	96 hours
	-	Acute LC50 >10000000	Fish - Bluegill - Lepomis	

-	ug/L Fresh water	macrochirus - 33 to 75 mm	96 hours
-	Acute LC50 4670000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate - 0 to 24 hours	48 hours

### Section 13. Disposal Considerations

#### Waste Information

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

**Waste Stream** Classification: - (Non-hazardous waste)

### Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
<b>DOT Classification</b>	Not regulated.	Not a DOT controlled material (United States).		-	
<b>TDG Classification</b>	Not regulated.				
<b>IMDG Class</b>	Not determined.				

**NOTE:** DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG\* : Packing group

### Section 15. Regulatory Information

#### U.S. Federal Regulations

SARA 313 toxic chemical notification and release reporting:

**Product name**

2-(2-ethoxyethoxy)ethanol

**Clean Water Act (CWA) 307:** No products were found.

**Clean Water Act (CWA) 311:** No products were found.

**Clean Air Act (CAA) 112 regulated toxic substances:** 2-(2-ethoxyethoxy)ethanol

All Components of this product are listed or exempt from listing on TSCA Inventory.

**TSCA 8(a) PAIR:** Tris(2-butoxyethyl) phosphate

**United States inventory (TSCA 8b):** All components are listed or exempted.

**TSCA 8(c) calls for record of SAR:** Tris(2-butoxyethyl) phosphate

#### State Regulations

**California Prop 65**

**WARNING:** This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.:  
Ethylene Glycol Monoethyl Ether

#### Canada

**WHMIS (Canada)**

Class D-2B: Material causing other toxic effects (Toxic).

### Section 16. Other Information

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

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# Safety Data Sheet

## Section 1. Chemical Product and Company Identification

**Product name** Neutral Floor Cleaner Concentrate (DfE)  
**Product code** ZUNEUT  
**Date of issue** 10/08/12 **Supersedes** 04/27/09  
 Not available.

### Emergency Telephone Numbers

**For MSDS Information:**  
 Compliance Services 404-352-1680

**For Medical Emergency**  
 (877) 541-2016 Toll Free - All Calls Recorded

**For Transportation Emergency**  
 CHEMTREC: (800) 424-9300 - All Calls Recorded  
 In the District of Columbia (202) 483-7616

**Prepared By**  
 Compliance Services  
 1420 Seaboard Industrial Blvd.  
 Atlanta, GA 30318

## Section 2. Hazards Identification

### Emergency overview

\*Hazard Determination System (HDS): Health, Flammability, Reactivity

**WARNING!**



CAUSES EYE IRRITATION.

May be harmful if swallowed. Irritating to eyes and skin. Do not ingest. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

**NOTE:** MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

**Acute Effects**      **Routes of Entry**      Eye contact.

**Eyes** Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

**Skin** May cause slight irritation in sensitive individuals.

**Inhalation** No known acute effects of this product resulting from inhalation.

**Ingestion** May be harmful if swallowed. Ingestion may cause gastrointestinal irritation and diarrhea.

**Chronic effects** There is no known chronic effect after exposure to this product.

**Carcinogenicity** Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

### Product/ingredient name

Not available.

**Additional Information:** See Toxicological Information (Section 11)

## Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
DIPROPYLENE GLYCOL N-PROPYL ETHER; 2-propanol, 1-(1-methyl-2-propoxyethoxy)	29911-27-1	1 - 5
Alkyl(C9-11) alcohol, ethoxylated	68439-46-3	1.993

## Section 4. First Aid Measures

**Eye Contact** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation, redness or discomfort is present, get medical attention immediately.

**Skin Contact** Rinse with plenty of running water. Get medical attention if irritation develops.

**Inhalation** No adverse health effects anticipated from the solution with exposure.

**Ingestion** If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Call medical attendant, medical doctor, or poison control center.

**Section 5. Fire Fighting Measures**

National Fire Protection Association (U.S.A.)



<b>Flash Point</b>	None.
<b>Flammable Limits</b>	Not applicable.
<b>Flammability</b>	Non-flammable.
<b>Fire hazard</b>	No specific hazard.
<b>Fire-Fighting Procedures</b>	Use an extinguishing agent suitable for the surrounding fire.

**Section 6. Accidental Release Measures**

**Spill Clean up** Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning the spill area with running water.

**Section 7. Handling and Storage**

<b>Handling</b>	Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Do not reuse container. Wash thoroughly after handling.
<b>Storage</b>	Keep container tightly closed and sealed until ready for use. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

**Section 8. Exposure Controls/Personal Protection**

**Product name** **Exposure limits**

No exposure limit value known.

**Personal Protective Equipment (PPE)**

<b>Eyes</b>	Recommended: Safety glasses.
<b>Body</b>	For prolonged or repeated handling, use latex rubber gloves.
<b>Respiratory</b>	No respiratory protection needed under normal use conditions.

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid.	<b>Color</b>	Clear. Green.
<b>pH</b>	7.5 - 8.5	<b>Odor</b>	Pleasant.
<b>Boiling Point</b>	100°C (212°F)	<b>Vapor Pressure</b>	Not determined.
<b>Specific Gravity</b>	1.03	<b>Vapor Density</b>	Not determined.
<b>Solubility</b>	Soluble in water in any proportion.	<b>Evaporation Rate</b>	Not determined.
		<b>VOC (Consumer)</b>	0 (g/l). 0 lbs/gal (0 g/l)

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Not available.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Section 11. Toxicological Information****Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
1-(1-methyl-2-propoxyethoxy)propan-2-ol	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>1500 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
Alkyl(C9-11) alcohol, ethoxylated	LD50 Oral	Rat	1378 mg/kg	-

**Section 12. Ecological Information****Environmental Effects** Not available.**Aquatic Ecotoxicity**

Alkyl(C9-11) alcohol, ethoxylated	-	Acute EC50 5.36 mg/L Fresh water	Crustaceans - Water flea - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	-	Acute EC50 2686 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate - <24 hours	48 hours
	-	Acute LC50 8500 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours

**Section 13. Disposal Considerations****Waste Information**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

**Waste Stream** Code: -  
Classification: - [Non-hazardous waste]  
Origin: -

**Section 14. Transport Information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
<b>DOT Classification</b>	Not regulated.	None.	Not applicable	-	
<b>TDG Classification</b>	Not regulated.	None.	Not applicable	-	
<b>IMDG Class</b>	Not available.	Not available.	Not available.	-	

**NOTE:** DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG\* : Packing group

**Section 15. Regulatory Information****U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

No products were found.

**Clean Water Act (CWA) 311:** No products were found.

**Clean Air Act (CAA) 112 regulated toxic substances:** No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

**TSCA 8(a) IUR:** Not determined

**United States inventory (TSCA 8b):** All components are listed or exempted.

**State Regulations**

**California Prop 65** No products were found.

**Canada**

**WHMIS (Canada)** Not controlled under WHMIS (Canada).

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