



# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

**Product name** Heavy-Duty Citrus Degreaser  
**Product code** ZUCIT  
**Date of issue** 10/14/08 **Supersedes** 08/29/07

### Emergency Telephone Numbers

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

**For Medical Emergency**  
 INFOTRAC: (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 !**

COMBUSTIBLE. CAUSES EYE IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL IF SWALLOWED.

\*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. May cause skin sensitization. May cause allergic reactions in certain individuals. Skin inflammation is characterized by itching, scaling, or reddening.

**Inhalation** Over-exposure by inhalation may cause respiratory irritation.

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

Prolonged or repeated contact may dry skin and cause irritation. Contains material which may cause damage to the following organs: upper respiratory tract, blood, kidneys, lungs, liver.

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

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

## Section 3. Composition/Information on Ingredients

### Name of Hazardous Ingredients

### CAS number

### % by Weight

D-LIMONENE; orange distillate; citrus terpene; cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)-	5989-27-5	1 - 5
MONOETHANOLAMINE; 2-aminoethanol; MEA	141-43-5	1 - 5
DIETHYLENE GLYCOL MONOBUTYL ETHER; 2-(2-butoxyethoxy)-ethanol; butyl carbitol	112-34-5	1 - 5
DIPROPYLENE GLYCOL N-BUTYL ETHER; 1-(2-butoxy-1-methoxy)- 2-propanol; Glycol Ether DPNB	29911-28-2	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. 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. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Get medical attention if irritation develops.

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

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

**Section 5. Fire Fighting Measures**

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



<b>Flash Point</b>	Closed cup: 51.1°C (124°F) [Tagliabue.]
<b>Flammable Limits</b>	Not determined.
<b>Flammability</b>	COMBUSTIBLE.
<b>Fire hazard</b>	Combustible liquid and vapor. Keep away from heat, sparks and flame.
<b>Fire-Fighting Procedures</b>	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam. Fire-fighters should wear appropriate protective equipment. Do not release runoff from fire to sewers or waterways.

**Section 6. Accidental Release Measures**

<b>Spill Clean up</b>	Eliminate all ignition sources. Put on appropriate personal protective equipment (see section 8). 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**

<b>Handling</b>	Put on appropriate personal protective equipment (see section 8). Store and use away from heat, sparks, open flame or any other ignition source. Avoid contact with eyes, skin and clothing. Avoid breathing vapors, spray or mists. Use only with adequate ventilation. Do not ingest. Observe label precautions. Wash thoroughly after handling. Empty containers retain product residue and can be hazardous. Do not reuse container.
<b>Storage</b>	Keep away from heat and direct sunlight. Avoid all possible sources of ignition (spark or flame). Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

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

MONOETHANOLAMINE; 2-aminoethanol; MEA

DIETHYLENE GLYCOL MONOBUTYL ETHER; 2-(2-butoxyethoxy)-ethanol; butyl carbitol

**Exposure limits****OSHA PEL / ACGIH TLV (United States).**

TWA: 3 ppm 8 hour(s).

**OSHA /ACGIH (United States).**

STEL: 6 ppm 15 minute(s).

**Manufacturer (United States).**

TWA: 35 ppm 8 hour(s).

**Personal Protective Equipment (PPE)**

<b>Eyes</b>	Safety glasses.	
<b>Body</b>	For prolonged or repeated handling, use gloves. Recommended: Neoprene gloves. Nitrile gloves. Rubber gloves.	
<b>Respiratory</b>	Use with adequate ventilation. A respirator is not needed under normal and intended conditions of product use.	

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid.	<b>Color</b>	Clear. Amber.
<b>pH</b>	11.0 - 12.0	<b>Odor</b>	Citrus
<b>Boiling Point</b>	Not available.	<b>Vapor Pressure</b>	Not available.
<b>Specific Gravity</b>	1.01	<b>Vapor Density</b>	Not determined.
<b>Solubility</b>	Soluble in water.	<b>Evaporation Rate</b>	1 (Water = 1)
		<b>VOC (Consumer)</b>	4.0% 0.34 lbs/gal 40 (g/l).

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Combustible materials should be stored away from extreme heat and away from strong oxidizing agents. Incompatible with some strong acids. Reactive with acidic clay (i.e. clay absorbent)
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	carbon oxides, nitrogen oxides (NO, NO <sub>2</sub> etc.)

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

Product/ingredient name	Result	Species	Dose	Exposure
Monoethanolamine	LD50 Dermal	Rabbit	>1000 mg/kg	-
	LD50 Oral	Rat	1720 mg/kg	-
Diethylene Glycol Monobutyl Ether	LD50 Dermal	Rabbit	2700 mg/kg	-
	LD50 Oral	Rat	5660 mg/kg	-
	LD50 Oral	Mouse	2400 mg/kg	-

**Section 12. Ecological Information**

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

**Aquatic Ecotoxicity**

Not available.

**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 applicable.	Not a DOT controlled material (United States).			
<b>TDG Classification</b>					
<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**

Diethylene Glycol Monobutyl Ether

**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:** Diethylene Glycol Monobutyl Ether

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

**State Regulations**

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

**Canada****WHMIS (Canada)**

Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).

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.