



ENFORCER Products
 A Division of Acuity Specialty Products
 Group, Inc.
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 1-888-805-HELP
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Material Safety Data Sheet and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name **Citrus Cleaner & Degreaser Concentrate**
Product Code **HDCIT**
Date of issue **04/04/07** **Supersedes** 01/21/05

Emergency Telephone Numbers **For a Medical Emergency:**
 INFOTRAC
 (877) 541-2016 (Toll Free - Calls Recorded)

For a Transportation Emergency:
 CHEMTREC
 (800) 424-9300 (Toll Free - Calls Recorded)

Printing Date:

Prepared by Compliance Services Group
 Acuity Specialty Products Group
 1420 Seaboard Industrial Blvd.
 Atlanta, GA 30318

Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
D-LIMONENE - orange distillate; citrus terpene; cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)-MONOETHANOLAMINE; 2-aminoethanol; MEA	5989-27-5 141-43-5	1 - 5 1 - 5	Not established 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).
DIETHYLENE GLYCOL MONOBUTYL ETHER; 2-(2-butoxyethoxy)-ethanol; butyl carbitol	112-34-5	1 - 5	Manufacturer (United States). TWA: 35 ppm 8 hour(s).
DIPROPYLENE GLYCOL N-BUTYL ETHER; 1-(2-butoxy-1-methoxy)- 2-propanol; glycol ether dpnb	29911-28-2	1 - 5	Not established

Section 3. Hazards Identification

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

Skin Product may be dermal absorbed. May cause skin sensitization. Direct contact may cause irritation and redness. Skin inflammation is characterized by itching, scaling, or reddening.
Eyes Causes eye irritation. Inflammation of the eye is characterized by redness, watering, and itching.
Inhalation Avoid breathing vapors or spray mists. Over-exposure by inhalation may cause respiratory irritation.

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

Carcinogenic Effects Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Chronic Effects Prolonged or repeated contact may dry skin and cause irritation. The substance may be toxic to blood, kidneys, lungs, liver, gastrointestinal tract, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

See Toxicological Information (section 11)

HMIS

Health	1
Fire Hazard	2
Reactivity	0
Personal Protection	B

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin Contact In case of contact, immediately flush skin with plenty of water. Get medical attention if irritation develops.
Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point	Closed cup: 51.111°C (124°F). (Tagliabue.)	Flammable Limits Not determined.
Flammability	Combustible.	
Fire Hazard	Combustible liquid and vapor. Avoid all possible sources of ignition (spark or flame).	
Fire-Fighting Procedures	Use DRY chemicals, CO ₂ , water spray or foam. Fire-fighters should wear proper protective equipment.	

**Section 6. Accidental Release Measures**

Spill Clean up	Eliminate all ignition sources. Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
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Section 7. Handling and Storage

Handling	Keep away from heat, sparks and flame. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Do not ingest. Do not reuse product container. Observe label precautions. Wash thoroughly after handling.
Storage	Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Store between 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

Section 8. Exposure Controls, Personal Protection

	Personal Protection	Protective Clothing (Pictograms)
Eyes	Safety glasses.	
Body	Gloves. Recommended: Nitrile gloves. Rubber gloves. Neoprene 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.	Color Amber.
pH	11.0-12.0	Odor Citrus
Boiling Point	Not determined.	Vapor Pressure Not determined.
Specific Gravity	1.01 (Water = 1)	Vapor Density Not determined.
Solubility	Soluble in cold water, hot water.	Evaporation Rate 1 compared to water
		VOC (Consumer) 40.33 (g/l). 0.34 lbs/gal 4.00%

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Slightly reactive to reactive with oxidizing agents, alkalis. Keep away from heat, sparks and flame.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...).

Section 11. Toxicological Information

Toxicity to Animals	d-Limonene:
	ORAL (LD50): Acute: >5000 mg/kg [Rat].
	DERMAL (LD50): Acute: >5000 mg/kg [Rabbit].
	Monoethanolamine:
	ORAL (LD50): Acute: 1720 mg/kg [Rat.].
	Diethylene Glycol Monobutyl Ether:
	ORAL (LD50): Acute: 5660 mg/kg [Rat]. 2400 mg/kg [Mouse].
	DERMAL (LD50): Acute: 2700 mg/kg [Rabbit].

Section 12. Ecological Information

Ecotoxicity	Not available.
Biodegradable/OECD	Not available.

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	Code: D001 Classification: - (Hazardous waste.) Origin: - (RCRA waste.)

Consult your local or regional authorities.

Section 14. Transport Information

Proper shipping name	Not regulated.
DOT Classification	Not a DOT controlled material (United States).
UN number	Not regulated.
TDG Classification	Not a TDG controlled material.

Section 15. Regulatory Information

U.S. Federal Regulations	SARA 313 toxic chemical notification and release reporting: Diethylene Glycol Monobutyl Ether (Certain Glycol Ethers) 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.
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State Regulations	California prop. 65: No products were found.
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.