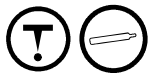





# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

 WHMIS (Pictograms)	WHMIS Class D-2B: Material causing other toxic effects (TOXIC).  WHMIS (Classification)	Class: Irritating substance.  HCS
---	---	---

## Section 1. Chemical Product and Company Identification

<b>Product Name/ Trade name</b> <b>Citrufoam</b>	<b>Code</b> 066
<b>Synonym</b> All Purpose Cleaner/Degreaser	<b>CAS #</b> Mixture.
<b>Chemical Family</b> Not available.	<b>Validation Date</b> 3/2/2007
<b>Chemical Formula</b> Not applicable.	<b>Print Date</b> 3/23/2007
<b>Manufacturer/ Supplier</b> Betco Corporation 1001 Brown Avenue Toledo, Oh 43607 (419) 241-2156	<b>In Case of Emergency</b> Chemtrec (800) 424-9300
<b>TSCA</b> TSCA Inventory: All components listed or are exempt from listing.	<b>Protective Clothing</b>  
<b>DSL/ NDSL</b> All components listed unless noted elsewhere on this MSDS	

## Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC <sub>50</sub> /LD <sub>50</sub>
Liquified Petroleum Gas	68476-85-7	5 - 10	TWA: 1000 ppm <b>OSHA (United States).</b> TWA: 1000 ppm	Not available.
Glycol Ether	112-34-5	0 - 5	Not available.	Not available.
Sodium Lauryl Sulfate	151-21-3	0 - 5	Not available.	Not available.
Citrus Terpenes	5989-27-5	0 - 5	Not available.	ORAL (LD50): Acute: 5000 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].
Monoethanolamine	141-43-5	0 - 5	TWA: 3 ppm <b>OSHA (United States).</b> TWA: 6 ppm STEL: 6 ppm	Not available.
Coconut Diethanolamide	8051-30-7	0 - 5	Not available.	Not available.
Tetrasodium salt of ethylenediaminetetraacetic acid	64-02-8	0 - 5	Not available.	ORAL (LD50): Acute: 3030 mg/kg [Rat].

## Section 3. Hazards Identification

<b>Potential Acute Health Effects</b>	Irritant. Irritating to mouth, throat and stomach. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
<b>Potential Chronic Health Effects</b>	Repeated skin exposure can produce local skin destruction, or dermatitis.
<b>Carcinogenic Effects</b>	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

#### Section 4. First Aid Measures

Eye Contact	Flush with large quantities of water. Seek medical attention if irritation persists.
Skin Contact	Flush with water. Seek medical attention if irritation occurs.
Inhalation	N/A
Ingestion	Dilute with two glasses of water. Seek medical attention if symptoms persists.

#### Section 5. Fire Fighting Measures

Products of Combustion	Not available.
Fire Fighting Media and Instructions	Water, foam, CO2, dry chemical
Special Remarks on Fire Hazards	N/A
Special Remarks on Explosion Hazards	Heated cans may burst.

#### Section 6. Accidental Release Measures

Small Spill and Leak	N/A
Large Spill and Leak	Aerosol that may flashback. Call for assistance on disposal.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

#### Section 7. Handling and Storage

Precautions	Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes
Incompatibility	None known.
Storage	Combustible materials should be stored away from extreme heat and away from strong oxidizing agents. Keep out of the reach of children. Not for use or storage in or around the home.

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

Engineering Controls Good general ventilation should be sufficient to control airborne levels.

##### Personal Protection

*Eyes* Safety glasses.

*Body*

*Respiratory* Not applicable.

*Hands* Gloves.

Protective Clothing  
(Pictograms)



**Exposure Limits****Liquified Petroleum Gas**

TWA: 1000 (ppm)

TWA: 1000 (ppm) from OSHA (PEL) [United States]

**Monoethanolamine**

TWA: 3 (ppm)

TWA: 6 (ppm) from OSHA (PEL) [United States]

STEL: 6 (ppm)

Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

<b>Physical State and Appearance</b>	Liquid.	<b>Odor</b>	Pleasant.
<b>Molecular Weight</b>	Not applicable.	<b>Taste</b>	
<b>pH</b>	11.5 - 12.5	<b>Color</b>	White Foam
<b>Boiling/Condensation Point</b>	N/A		
<b>Melting/Freezing Point</b>	Not available.		
<b>Critical Temperature</b>	Not available.		
<b>Instability Temperature</b>	Not available.		
<b>Specific Gravity</b>	Not available.		
<b>Vapor Pressure</b>	40 psig @ 68°F		
<b>Vapor Density</b>	>1 (Air = 1)		
<b>Volatility</b>	95		
<b>VOC</b>	46 (%)		
<b>Evaporation Rate</b>	<1		
<b>Dispersion Properties</b>	See solubility in water.		
<b>Solubility</b>	Easily soluble in cold water.		
<b>The Product is:</b>	May be combustible at high temperature.		
<b>Auto-ignition Temperature</b>	Not available.		
<b>Flash Points</b>	Not available.		
<b>Flammable Limits</b>	LOWER: 1.8% UPPER: 8.4%		
<b>Fire Hazards in Presence of Various Substances</b>	Not available.		
<b>Explosion Hazards in Presence of Various Substances</b>	Containers may explode when heated.		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Incompatibility with Various Substances</b>	None known.
<b>Hazardous Decomposition Products</b>	Will not occur.

### Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 3030 mg/kg [Rat]. (Tetrasodium salt of ethylenediaminetetraacetic acid).
Acute Effects on Humans	<i>Eyes</i> Eye irritant. May cause redness and swelling of the conjunctiva. <i>Skin</i> Defatting to skin on repeated contact. <i>Inhalation</i> N/A <i>Ingestion</i> May be irritating to the gastrointestinal system. Vomiting and diarrhea expected with large doses.
Chronic Effects on Humans	Repeated skin exposure can produce local skin destruction, or dermatitis.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.

### Section 12. Ecological Information

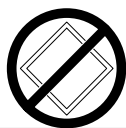
Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation	Not available.

### Section 13. Disposal Considerations

Waste Information	Any method in accordance with applicable laws.
Waste Stream	Not available.

### Section 14. Transport Information

DOT (U.S.A)  
(Pictograms)



TDG Classification Not controlled under TDG (Canada).



PIN UN, Proper Shipping Name, PG Not applicable.

Maritime Transportation Not available.

Special Provisions for Transport Not applicable.

### Section 15. Other Regulatory Information and Pictograms

**WHMIS (Classification)** WHMIS Class D-2B: Material causing other toxic effects (TOXIC).



**Regulatory Lists** No products were found.

**Other Regulations** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications** **HCS (U.S.A.)** Class: Irritating substance.

**USA Regulatory Lists**

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Glycol Ether  
 SARA 313 toxic chemical notification and release reporting: Glycol Ether

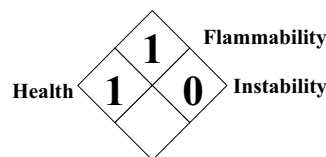
**DSD (EEC)** This product is not classified according to the EU regulations.

**International Regulations Lists** No products were found.

**Hazardous Material Information System (U.S.A.)**

Health	1
Flammability	1
Physical Hazard	0

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



The Hazard Ranking systems presented on this MSDS provide only a quick reference for hazard information. The ENTIRE MSDS must be consulted to determine any specific hazards, First Aid measures, and PPE associated with this product.

### Section 16. Other Information

Validated by CRushton on 3/2/2007.

Verified by CRushton.  
 Printed 3/23/2007.

**Information Contact Betco Corporation**  
 1001 Brown Avenue  
 Toledo, Ohio 43607  
 (419) 241-2156

Notice to Reader:

*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.*

Validated on 3/2/2007.

**Citrufoam**

Page: 5/5

**Continued on Next Page**