



Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

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

Section 1. Chemical Product and Company Identification

Product Name/ Trade name	Citrufoam	Code	066
Synonym	All Purpose Cleaner/Degreaser	CAS #	Mixture.
Chemical Family	Not available.	Validation Date	3/20/2004
Chemical Formula	Not applicable.	Print Date	3/27/2004
Manufacturer/ Supplier	Betco Corporation 1001 Brown Avenue Toledo, Oh 43607 (419) 241-2156	In Case of Emergency	Chemtrec (800) 424-9300
TSCA	TSCA Inventory: All components listed or are exempt from listing.		
DSL/ NDSL	All components listed unless noted elsewhere on this MSDS		
		Protective Clothing 	

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
1) Liquified Petroleum Gas	68476-85-7	5-10	TWA: 1000 (ppm) TWA: 1000 (ppm) from OSHA (PEL) [United States]	Not available.
2) Glycol Ether	112-34-5	0-5	Not available.	Not available.
3) Sodium Lauryl Sulfate	151-21-3	0-5	Not available.	Not available.
4) Amphoteric Surfactant	68298-20-4	0-5	Not available.	Not available.
5) Citrus Terpenes	5989-27-5	0-5	Not available.	ORAL (LD50): Acute: 5000 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].
6) Monoethanolamine	141-43-5	0-5	TWA: 3 (ppm) TWA: 6 (ppm) from OSHA (PEL) [United States] STEL: 6 (ppm)	Not available.
7) Coconut Diethanolamide	8051-30-7	0-5	Not available.	Not available.
8) Tetrasodium salt of ethylenediaminetetraacetic acid	64-02-8	0-5	Not available.	ORAL (LD50): Acute: 3030 mg/kg [Rat].

Section 3. Hazards Identification

Potential Acute Health Effects	Irritant. Irritating to mouth, throat and stomach. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Potential Chronic Health Effects	Repeated skin exposure can produce local skin destruction, or dermatitis.
Carcinogenic Effects	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

Physical State and Appearance	Liquid.	Odor	Pleasant.
Molecular Weight	Not applicable.	Taste	
pH	10 to 11 [Basic.]	Color	White Foam
Boiling/Condensation Point	N/A		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	Not available.		
Vapor Pressure	40 psig @ 68°F		
Vapor Density	>1 (Air = 1)		
Volatility	95		
VOC	46 (%)		
Evaporation Rate	<1		
Dispersion Properties	See solubility in water.		
Solubility	Easily soluble in cold water.		
The Product is:	May be combustible at high temperature.		
Auto-ignition Temperature	Not available.		
Flash Points	Not available.		
Flammable Limits	LOWER: 1.8% UPPER: 8.4%		
Fire Hazards in Presence of Various Substances	Not available.		
Explosion Hazards in Presence of Various Substances	Containers may explode when heated.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substances	None known.
Hazardous Decomposition Products	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).



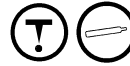
PIN UN, Proper Shipping Name, PG Not applicable.

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).

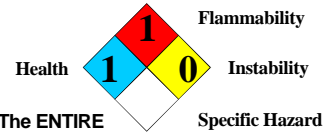
Other Classifications

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 3/20/2004.

Verified by CRushton.

Printed 3/27/2004.

Information Contact **Betco Corporation**
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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.