




Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

	E	Class: Corrosive material
WHMIS (Pictograms)	WHMIS (Classification)	HCS

Section 1. Chemical Product and Company Identification

Product Name/ Trade name	CitruSpray	Code	137
Synonym	Ready-To-Use Foaming Degreaser	CAS #	Mixture.
Chemical Family	N/A	Validation Date	3/2/2007
Chemical Formula	N/A	Print Date	3/23/2007
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
Water	7732-18-5	90-95	Not available.	Not available.
Glycol Ether	112-34-5	0-5	Not available.	Not available.
Amphoteric Surfactant	68298-20-4	0-5	Not available.	Not available.
Nonionic Surfactant	9016-45-9	0-5	Not available.	Not available.
Sodium Metasilicate	6834-92-0	0-5	Not available.	Not available.
Xanthan Gum	11138-66-2	0-5	Not available.	ORAL (LD50): Acute: 45000 mg/kg [Rat].
Tetrasodium salt of ethylenediaminetetraacetic acid	64-02-8	0-5	Not available.	ORAL (LD50): Acute: 3030 mg/kg [Rat].
Citrus Terpenes	5989-27-5	0-5	Not available.	ORAL (LD50): Acute: 5000 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].
Dye	N/A	<1	Not available.	Not available.

Section 3. Hazards Identification

Potential Acute Health Effects	Corrosive to eyes and skin. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Harmful if swallowed.
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	Hold eye open and rinse slowly and thoroughly with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor immediately for treatment advice.
Skin Contact	Rinse skin with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for further treatment advice.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration., preferably mouth to mouth if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Call a poison control center immediately for treatment advice. Have person sip a glass of water if able to swallow. Do NOT induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person

Section 5. Fire Fighting Measures

Products of Combustion	Not available.
Fire Fighting Media and Instructions	Non-flammable substance.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

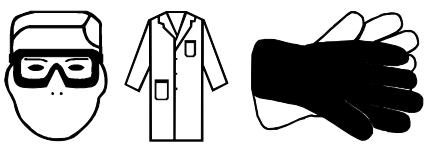
Section 6. Accidental Release Measures

Small Spill and Leak	Absorb with an inert material and place in an appropriate waste disposal container.
Large Spill and Leak	Corrosive liquid. Avoid to runoff to sewers and waterways. Wear Protective Clothing. Absorb with inert Material. Contact you local Emergency planning commission for further instructions. Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Personal Protection in Case of a Large Spill	Gloves (impervious). Boots. Face shield.

Section 7. Handling and Storage

Precautions	Avoid contact with skin and eyes. DO NOT ingest.
Incompatibility	acids
Storage	Corrosive materials should be stored in a separate safety storage cabinet or room. Keep out of reach of children. For Institutional and Commercial Use

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Good general ventilation should be sufficient to control airborne levels.
Personal Protection	
<i>Eyes</i>	Splash goggles.
<i>Body</i>	Long Pants and Long Sleeves to avoid skin cotact.
<i>Respiratory</i>	Wear appropriate respirator when ventilation is inadequate.
<i>Hands</i>	Gloves (impervious).
Protective Clothing (Pictograms)	

Exposure Limits**Sodium Hydroxide**TWA: 2 (mg/m³) from OSHA (PEL)

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid	Odor	Citrus
Molecular Weight	Not applicable.	Taste	Not available.
pH	12.5 to 13.5 [Basic.]	Color	Orange.
Boiling/Condensation Point	100°C (212°F)		
Melting/Freezing Point			
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	1 (Water = 1)		
Vapor Pressure	Not available.		
Vapor Density	>1 (Air = 1)		
Volatility	>85% (w/w).		
VOC	31.934 (g/l).		
Evaporation Rate	<1		
Dispersion Properties	See solubility in water.		
Solubility	Soluble		
The Product is:	Non-flammable.		
Auto-ignition Temperature	Not available.		
Flash Points	CLOSED CUP: >98.889°C (210°F).		
Flammable Limits	Not available.		
Fire Hazards in Presence of Various Substances	Non-flammable.		
Explosion Hazards in Presence of Various Substances	Not applicable		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substances	acids
Hazardous Decomposition Products	not available

Section 11. Toxicological Information

Routes of Entry Skin contact. Eye Contact Ingestion. INHALATION

Toxicity to Animals not available

Acute Effects on Humans

Eyes Corrosive to eyes.

Skin Corrosive to skin on contact. Skin contact may produce burns.

Inhalation Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Over-exposure by inhalation may cause respiratory irritation.

Ingestion May be fatal if swallowed. May cause burns to mouth, throat, and stomach.

Chronic Effects on Humans Repeated skin exposure can produce local skin destruction, or dermatitis.

Special Remarks on Toxicity to Animals No additional remark.

Special Remarks on Chronic Effects on Humans No additional remark.

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 No additional remark.

Section 13. Disposal Considerations

Waste Information Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Waste Stream Not available.

Section 14. Transport Information

DOT (U.S.A) (Pictograms)



TDG Classification Class 8: Corrosive material



PIN UN, Proper Shipping Name, PG Shipping name: CORROSIVE LIQUIDS, N.O.S. UNNA: UN1760 PG: II (Contains Caustic Soda)

Maritime Transportation Not available.

Special Provisions for Transport Not available.

Section 15. Other Regulatory Information and Pictograms

WHMIS (Classification) E



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: Corrosive material

USA Regulatory Lists

California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Ethylene Oxide < 1 ppm
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Ethylene Oxide < 1 ppm
Massachusetts RTK: Ethylene Oxide
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Glycol Ether; Sodium Hydroxide: immediate health hazard
SARA 313 toxic chemical notification and release reporting: Glycol Ether

DSD (EEC)

This product is not classified according to the EU regulations.

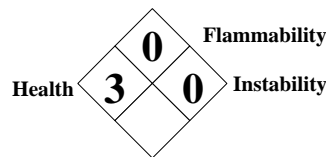
International Regulations Lists

No products were found.

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

Health	3
Flammability	0
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

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.

Continued on Next Page