




# 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

<b>Product Name/ Trade name</b>	<b>CitruSpray</b>	<b>Code</b>	<b>137</b>
<b>Synonym</b>	Ready-To-Use Foaming Degreaser	<b>Version Number</b>	
<b>Chemical Family</b>	N/A	<b>Validation Date</b>	3/2/2010
<b>Chemical Formula</b>	N/A	<b>Print Date</b>	3/3/2010
<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>DSL/ NDSL</b>	All components listed unless noted elsewhere on this MSDS		
		<b>Protective Clothing</b> 	

## Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC <sub>50</sub> /LD <sub>50</sub>
Water	7732-18-5	90 - 95	Not available.	Not available.
Citrus Terpenes	94266-47-4	1 - 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].
Glycol Ether	112-34-5	0 - 5	Not available.	Not available.
Dye	N/A	<1	Not available.	Not available.

## Section 3. Hazards Identification

<b>Potential Acute Health Effects</b>	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.
<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

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Rinse skin with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for further treatment advice.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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

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

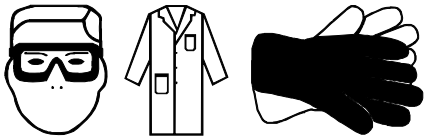
### Section 6. Accidental Release Measures

<b>Small Spill and Leak</b>	Absorb with an inert material and place in an appropriate waste disposal container.
<b>Large Spill and Leak</b>	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.
<b>Personal Protection in Case of a Large Spill</b>	Gloves (impervious). Boots. Face shield.

### Section 7. Handling and Storage

<b>Precautions</b>	Avoid contact with skin and eyes. DO NOT ingest.
<b>Incompatibility</b>	acids
<b>Storage</b>	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

<b>Engineering Controls</b>	Good general ventilation should be sufficient to control airborne levels.
<b>Personal Protection</b>	
<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).
<b>Protective Clothing (Pictograms)</b>	

**Exposure Limits****Sodium Hydroxide**TWA: 2 (mg/m<sup>3</sup>) from OSHA (PEL)

Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

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

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Incompatibility with Various Substances</b>	acids
<b>Hazardous Decomposition Products</b>	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.

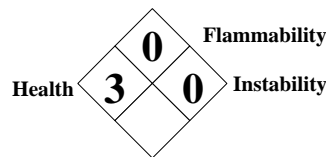
International Regulations Lists

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 3/2/2010.

Verified by CRushton.  
Printed 3/3/2010.

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.

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