



# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200



WHMIS Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). WHMIS Class D-2B: Material causing other toxic effects (TOXIC).

Class: Irritating substance.  
Class: Combustible liquid having a flash point between 37.8°C (100°F) and 93.3°C (200°F).

WHMIS (Pictograms)

WHMIS (Classification)

HCS

## Section 1. Chemical Product and Company Identification

Product Name/ Trade name	<b>CitruSolv Concentrate</b>	Code	209
Synonym	Natural Degreaser/Deodorizer	CAS #	Mixture.
Chemical Family	Not available.	Validation Date	3/22/2004
Chemical Formula	Not applicable.	Print Date	3/27/2004
Manufacturer/ Supplier	Betco Corporation 1001 Brown Avenue Toledo, Ohio 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 <sub>50</sub> /LD <sub>50</sub>
1) Citrus Terpenes	5989-27-5	95-100	Not available.	ORAL (LD50): Acute: 5000 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].
2) Nonionic Surfactant	9016-45-9	0-5	Not available.	Not available.

## Section 3. Hazards Identification

Potential Acute Health Effects	This product may irritate eyes and skin upon contact. Harmful if swallowed. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.
Potential Chronic Health Effects	May aggravate existing respiratory conditions such as asthma.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

## Section 4. First Aid Measures

Eye Contact	Flush eyes with large quantities of water. Seek medical attention if irritation persists.
Skin Contact	Remove contaminated clothing. Flush with water. Seek medical attention if irritation occurs.
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. Do not induce vomiting.

### Section 5. Fire Fighting Measures

Products of Combustion	Not Applicable
Fire Fighting Media and Instructions	Foam, CO2, or dry chemical.
Special Remarks on Fire Hazards	Do not use water.
Special Remarks on Explosion Hazards	Drums heated by a fire can explode.

### Section 6. Accidental Release Measures

Small Spill and Leak	Safety glasses.
Large Spill and Leak	Absorb with DRY earth, sand or other non-combustible material.
Personal Protection in Case of a Large Spill	Be sure to use a MSHA/NIOSH approved respirator or equivalent. Gloves (impervious). Face shield. Boots.

### Section 7. Handling and Storage

Precautions	Avoid breathing vapors or spray mists. Avoid contact with skin and eyes. DO NOT ingest.
Incompatibility	acids, oxidizing materials, Iodine pentafluoroethylene
Storage	Keep out of reach of children. For Institutional and Commercial Use Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

### Section 8. Exposure Controls/Personal Protection

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

#### Personal Protection

*Eyes* Splash goggles.

*Body* No special protective clothing is required.

*Respiratory* Wear appropriate respirator when ventilation is inadequate.

*Hands* Gloves.

#### Protective Clothing (Pictograms)



Exposure Limits Not available.

### Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid	Odor	Pleasant.
Molecular Weight	Not applicable.	Taste	Not available.
pH	Not available.	Color	Colorless.
Boiling/Condensation Point	340°F initial		
Melting/Freezing Point			
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	0.85 (Water = 1)		

Vapor Pressure	<10mm Hg @ 68°F
Vapor Density	>1 (Air = 1)
Volatility	90
VOC	>95%
Evaporation Rate	Less than Butyl acetate.
Dispersion Properties	Not available.
Solubility	Soluble
The Product is:	COMBUSTIBLE.
Auto-ignition Temperature	Not available.
Flash Points	CLOSED CUP: 51.667°C (125°F).
Flammable Limits	Not Determined
Fire Hazards in Presence of Various Substances	COMBUSTIBLE.
Explosion Hazards in Presence of Various Substances	Drums Heated By Fire Can explode

### Section 10. Stability and Reactivity Data

Stability	Stable
Incompatibility with Various Substances	acids, oxidizing materials, Iodine pentafluoroethylene
Hazardous Decomposition Products	None Known

### Section 11. Toxicological Information

Routes of Entry	Eye Contact Ingestion. INHALATION Skin contact.
Toxicity to Animals	Irritant.
Acute Effects on Humans	<p><i>Eyes</i> Eye irritant. May cause redness, burning, or tearing.</p> <p><i>Skin</i> Defatting to skin with prolonged or repeated contact.</p> <p><i>Inhalation</i> May be irritating to mucous membranes of the nose, throat, and lungs.</p> <p><i>Ingestion</i> May be irritating to the mouth, throat, and gastrointestinal system. Aspiration hazard if swallowed- can enter lungs and cause chemical pneumonitis.</p>
Chronic Effects on Humans	May aggravate existing respiratory conditions such as asthma.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	Chemical pneumonitis.

**Section 12. Ecological Information**

Ecotoxicity Not Available

BOD5 and COD Not Available

Products of Biodegradation Not available.

Toxicity of the Products of Biodegradation Not Applicable

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 3



PIN UN, Proper Shipping Name, PG Shipping name: Flammable liquids n.o.s./Combustible Liquids UNNA: 1993 PG: III

Maritime Transportation Not available.

Special Provisions for Transport Not available.

**Section 15. Other Regulatory Information and Pictograms**

WHMIS (Classification) WHMIS Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). 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.  
Class: Combustible liquid having a flash point between 37.8°C (100°F) and 93.3°C (200°F).

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: Citrus Terpenes: fire, immediate health hazard

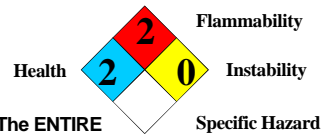
DSD (EEC) R10- Flammable.

International Regulations Lists No products were found.

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

Health	*	2
Flammability		2
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 3/22/2004.

Verified by CRushton.

Printed 3/27/2004.

**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.*

Validated on 3/22/2004.

**CitruSolv Concentrate**

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