





# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

 <b>WHMIS (Pictograms)</b>	<b>WHMIS Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).</b> <b>WHMIS (Classification)</b>	<b>HCS Class: Combustible liquid II having a flash point between 37.8°C (100°F) and 60.0°C (140°F). HCS Class: Irritating substance.</b> <b>HCS</b>
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## Section 1. Chemical Product and Company Identification

<b>Product Name/ Trade name</b> CitruSolv CS	<b>Code</b> 213
<b>Synonym</b> Natural Degreaser Deodorizer - Cold Solvent	<b>CAS #</b> Not applicable.
<b>Chemical Family</b> Not available.	<b>Validation Date</b> 3/22/2004
<b>Chemical Formula</b> Not applicable.	<b>Print Date</b> 3/27/2004
<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>
1) Petroleum Distillates	64742-48-9	>75	TWA: 500 (ppm) TWA: 100 (ppm) from OSHA (PEL)	Not available.
2) Citrus Terpenes	5989-27-5	<15	Not available.	Not available.

## Section 3. Hazards Identification

<b>Potential Acute Health Effects</b> 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> In case of contact with eyes, rinse immediately with plenty of water.
<b>Skin Contact</b> Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin.
<b>Inhalation</b> Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform mouth-to-mouth resuscitation.
<b>Ingestion</b> Do not induce vomiting. Call a poison control center immediately for treatment advice. NEVER give an unconscious person anything to ingest.

### Section 5. Fire Fighting Measures

Products of Combustion	Not available.
Fire Fighting Media and Instructions	In case of fire, use water spray (fog), foam, dry chemical, or CO2.
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	Absorb with DRY earth, sand or other non-combustible material.
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	Avoid contact with skin and eyes. Keep away from heat.
Incompatibility	Strong oxidizers. of oxidizing materials
Storage	Combustible materials should be stored away from extreme heat and away from strong oxidizing agents. Keep out of reach of children. For Institutional and Commercial Use

### Section 8. Exposure Controls/Personal Protection

Engineering Controls	If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.	
Personal Protection	<i>Eyes</i>	Splash goggles.
	<i>Body</i>	No special protective clothing is required.
	<i>Respiratory</i>	Wear appropriate respirator when ventilation is inadequate.
	<i>Hands</i>	Gloves.
Protective Clothing (Pictograms)		
Exposure Limits	<b>Petroleum Distillates</b> TWA: 500 (ppm) TWA: 100 (ppm) from OSHA (PEL)	
	Consult local authorities for acceptable exposure limits.	

### Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Odor	Characteristic.
Molecular Weight	Not applicable.	Taste	Not available.
pH	Not available.	Color	Clear
Boiling/Condensation Point	316°F initial		
Melting/Freezing Point	Not available.		

<b>Critical Temperature</b>	Not available.
<b>Instability Temperature</b>	Not available.
<b>Specific Gravity</b>	0.78 (Water = 1)
<b>Vapor Pressure</b>	<10mm Hg @ 68°F
<b>Vapor Density</b>	>1 (Air = 1)
<b>Volatility</b>	>90% (w/w).
<b>VOC</b>	91 (%)
<b>Evaporation Rate</b>	<1
<b>Dispersion Properties</b>	Not available.
<b>Solubility</b>	Insoluble in cold water, hot water.
<b>The Product is:</b>	COMBUSTIBLE.
<b>Auto-ignition Temperature</b>	Not available.
<b>Flash Points</b>	CLOSED CUP: 105 F
<b>Flammable Limits</b>	LOWER: 1% UPPER: 6%
<b>Fire Hazards in Presence of Various Substances</b>	No specific information is available in our database regarding the flammability of this product in presence of various materials.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

### **Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Incompatibility with Various Substances</b>	Strong oxidizers. of oxidizing materials
<b>Hazardous Decomposition Products</b>	Not available.

### **Section 11. Toxicological Information**

<b>Routes of Entry</b>	Not available.
<b>Toxicity to Animals</b>	LD50: Not available. LC50: Not available.
<b>Acute Effects on Humans</b>	<p><i>Eyes</i> Irritant. Inflammation of the eye is characterized by redness, watering, and itching.</p> <p><i>Skin</i> Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.</p> <p><i>Inhalation</i> May cause headache, dizziness. Irritant.</p> <p><i>Ingestion</i> Aspiration hazard if swallowed- can enter lungs and cause chemical pneumonitis. May cause headache, dizziness, nausea, vomiting and diarrhea.</p>
<b>Chronic Effects on Humans</b>	Repeated skin exposure can produce local skin destruction, or dermatitis.
<b>Special Remarks on Toxicity to Animals</b>	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

3



PIN UN, Proper Shipping Name, PG

Shipping name: Flammable liquids n.o.s. UNNA: 1993 PG: III  
(FOR GROUND SHIPMENT WITHIN NORTH AMERICA  
Combustible Liquids NOS, NA 1993, PG: III)

Please consult transportation regulations for any applicable exemptions.

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).



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.)

HCS Class: Combustible liquid II having a flash point between 37.8°C (100°F) and 60.0°C (140°F). HCS Class: Irritating substance.

USA Regulatory Lists

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:  
Petroleum Distillates: fire, immediate health hazard; Citrus Terpenes: fire,  
immediate health hazard

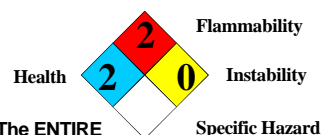
**DSD (EEC)** R10- Flammable.

**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 CS**

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