



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).

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.

WHMIS (Pictograms)

WHMIS (Classification)

HCS

Section 1. Chemical Product and Company Identification

Product Name/ Trade name	CitruSolv CS	Code	213
Synonym	Natural Degreaser Deodorizer - Cold Solvent	CAS #	Not applicable.
Chemical Family	Not available.	Validation Date	12/3/2008
Chemical Formula	Not applicable.	Print Date	12/3/2008
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
Petroleum Distillates	64742-48-9	>75	TWA: 500 ppm OSHA (United States). TWA: 100 ppm	Not available.
Citrus Terpenes	94266-47-4	10 - 15	Not available.	Not available.

Section 3. Hazards Identification

Potential Acute Health Effects	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	In case of contact with eyes, rinse immediately with plenty of water.
Skin Contact	Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin.
Inhalation	Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform mouth-to-mouth resuscitation.
Ingestion	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

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

Petroleum Distillates

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 Yellowish.

Boiling/Condensation Point 316°F initial

Melting/Freezing Point Not available.

Critical Temperature	Not available.
Instability Temperature	Not available.
Specific Gravity	0.78 (Water = 1)
Vapor Pressure	<2mm Hg @ 68°F
Vapor Density	>1 (Air = 1)
Volatility	>90% (w/w).
VOC	91 (%)
Evaporation Rate	<1
Dispersion Properties	Not available.
Solubility	Insoluble in cold water, hot water.
The Product is:	COMBUSTIBLE.
Auto-ignition Temperature	Not available.
Flash Points	CLOSED CUP: 105 F
Flammable Limits	LOWER: 1% UPPER: 6%
Fire Hazards in Presence of Various Substances	No specific information is available in our database regarding the flammability of this product in presence of various materials.
Explosion Hazards in Presence of Various Substances	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

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

Section 11. Toxicological Information

Routes of Entry	Not available.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Acute Effects on Humans	<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>
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

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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

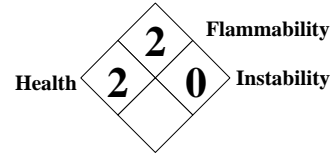
DSD (EEC) R10- Flammable.

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 12/3/2008.

Verified by CRushton.

Printed 12/3/2008.

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 12/3/2008.

CitruSolv CS

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