





Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

 WHMIS (Pictograms)	WHMIS CLASS B-5: Flammable aerosol. WHMIS CLASS D-2: Material causing other toxic effects. WHMIS (Classification)	HCS CLASS: Flammable aerosol. HCS CLASS: Irritating substance. HCS
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Section 1. Chemical Product and Company Identification

Product Name/ Trade name CitruSolv Spray	Code 021
Synonym Organic Solvent Cleaner/Degreaser	CAS # Mixture.
Chemical Family N/A	Validation Date 2/10/2005
Chemical Formula Not applicable.	Print Date 2/10/2005
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.	Protective Clothing 
DSL/ NDSL All components listed unless noted elsewhere on this MSDS	

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
Petroleum Distillate Petroleum Distillates	64742-89-8 64742-47-8	>1 >1	Not available. TWA: 100 ppm OSHA (United States). TWA: 300 ppm	Not available. Not available.
Citrus Terpenes	5989-27-5	>1	Not available.	ORAL (LD50): Acute: 5000 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].
Propane	74-98-6	>1	OSHA (United States). TWA: 1000 ppm Simple asphyxiant.	Not available.
Isobutane	75-28-5	>1	TWA: 800 ppm OSHA (United States). TWA: 800 ppm	Not available.

Section 3. Hazards Identification

Potential Acute Health Effects	Skin and eye irritant. Irritating to the mucous membranes of the nose, throat and lungs.
Potential Chronic Health Effects	Repeated skin exposure can produce local skin destruction, or dermatitis. Harmful: danger of serious damage to health by prolonged exposure if swallowed.
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. Seek medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Since the product is a gas and that it is mostly probable that it will be inhaled more than ingested, please consider first to look at the preventive measures in case of inhalation.

Section 5. Fire Fighting Measures

Products of Combustion	Not available.
Fire Fighting Media and Instructions	Use dry chemical or CO2.
Special Remarks on Fire Hazards	N/A
Special Remarks on Explosion Hazards	Not available.

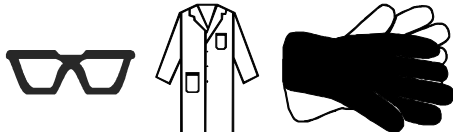
Section 6. Accidental Release Measures

Small Spill and Leak	Try to stop the gaseous leak by taping the container with an appropriate material (tape, stretched plastic).
Large Spill and Leak	Aerosol that may flashback. 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). Splash goggles.

Section 7. Handling and Storage

Precautions	Avoid breathing vapors or spray mists.
Incompatibility	oxidizing agents
Storage	Flammable materials should be stored in a separate safety storage cabinet or room. Keep out of reach of children. Not for use or storage in or around the home.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Good general ventilation should be sufficient to control airborne levels.
Personal Protection	
<i>Eyes</i>	Safety glasses.
<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	Not available.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Gas. (Compressed gas.)	Odor	Pleasant.
Molecular Weight	Not applicable.	Taste	Not available.
pH	Not Available	Color	Colorless.
Boiling/Condensation Point	N/A		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	Not available.		
Vapor Pressure	Not applicable.		
Vapor Density	>1 (Air = 1)		
Volatility	Not available.		
VOC	Not available.		
Evaporation Rate	>1		
Dispersion Properties	Disperses		
Solubility	Not available.		
The Product is:	FLAMMABLE.		
Auto-ignition Temperature	Not Available		
Flash Points	EXTREMELY FLAMMABLE PER CPSC FLAME PROJECTION TEST		
Flammable Limits	Not available.		
Fire Hazards in Presence of Various Substances	Flammable.		
Explosion Hazards in Presence of Various Substances	Explosive in presence of heat.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substances	oxidizing agents
Hazardous Decomposition Products	Carbon Dioxide

Section 11. Toxicological Information

Routes of Entry	Eye Contact Ingestion. INHALATION Skin contact.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Acute Effects on Humans	<p><i>Eyes</i> This product is an eye irritant. Inflammation of the eye is characterized by redness, watering, and itching.</p> <p><i>Skin</i> Slightly irritating</p> <p><i>Inhalation</i> Irritating to mouth, throat and stomach.</p> <p><i>Ingestion</i> Aspiration hazard if swallowed- can enter lungs and cause damage. Gastrointestinal discomfort.</p>
Chronic Effects on Humans	Repeated skin exposure can produce local skin destruction, or dermatitis. Harmful: danger of serious damage to health by prolonged exposure if swallowed.
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	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 TDG Class 3: Flammable liquid.



PIN UN, Proper Shipping Name, PG UN1950 Aerosols, Flammable

Maritime Transportation Not available.

Special Provisions for Transport Not applicable.

Section 15. Other Regulatory Information and Pictograms

WHMIS (Classification) WHMIS CLASS B-5: Flammable aerosol. WHMIS CLASS D-2: Material causing other toxic effects.



Regulatory Lists No products were found.

Other Regulations Not available. or of its ingredients

Other Classifications HCS (U.S.A.) HCS CLASS: Flammable aerosol. HCS CLASS: Irritating substance.

USA Regulatory Lists

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Citrus Terpenes: Fire hazard, Immediate (Acute) Health Hazard

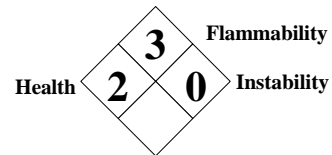
DSD (EEC)

International Regulations Lists No products were found.

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

Health	*	2
Flammability		3
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.

Specific Hazard

Section 16. Other Information

Validated by CRushton on 2/10/2005.

Verified by CRushton.

Printed 2/10/2005.

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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