





# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

  <p>WHMIS (Pictograms)</p>	<p>CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).          WHMIS Class D-1B: Material causing immediate and serious toxic effects (TOXIC).</p> <p>WHMIS (Classification)</p>	<p>HCS Class: Flammable liquid having a flash point lower than 37.8°C (100°F).          HCS CLASS: May be toxic for the nervous system.</p> <p>HCS</p>
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## Section 1. Chemical Product and Company Identification

<b>Product Name/ Trade name</b>	<b>Deep Freeze</b>	<b>Code</b>	132
<b>Synonym</b>	Cold Room Cleaner	<b>CAS #</b>	Mixture.
<b>Chemical Family</b>	Not available.	<b>Validation Date</b>	3/2/2007
<b>Chemical Formula</b>	Not applicable.	<b>Print Date</b>	3/23/2007
<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		

**Protective Clothing**



## Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC <sub>50</sub> /LD <sub>50</sub>
Methanol	67-56-1	40-45	TWA: 200 (ppm) TWA: 200 (ppm) from OSHA (PEL) [United States]	Not available.
2-Butoxyethanol	111-76-2	0-5	STEL: 250 (ppm) TWA: 20 (ppm) from ACGIH (TLV) [United States] TWA: 50 (ppm) from OSHA (PEL) [United States]	ORAL (LD50): Acute: 1746 mg/kg [Rat].

## Section 3. Hazards Identification

<b>Potential Acute Health Effects</b>	May be fatal if swallowed. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Skin contact can produce inflammation and blistering. Harmful if absorbed through the skin. This product is an eye irritant.
<b>Potential Chronic Health Effects</b>	Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs. Severe over-exposure can result in death.
<b>Carcinogenic Effects</b>	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

#### Section 4. First Aid Measures

<b>Eye Contact</b>	Flush eyes with large quantities of water, lifting eyelids. Seek medical attention if irritation persists.
<b>Skin Contact</b>	Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation persists.
<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. INDUCE VOMITING by sticking finger in throat. NEVER give an unconscious person anything to ingest.

#### Section 5. Fire Fighting Measures

<b>Products of Combustion</b>	Not available.
<b>Fire Fighting Media and Instructions</b>	Cool containing vessels with flooding quantities of water until well after fire is out.
<b>Special Remarks on Fire Hazards</b>	Water is very effective.
<b>Special Remarks on Explosion Hazards</b>	Drums heated by a fire can explode.


#### Section 6. Accidental Release Measures

<b>Small Spill and Leak</b>	Absorb with an inert material.
<b>Large Spill and Leak</b>	Flammable liquid. Poisonous liquid. Prevent entry into sewers, basements or confined areas; dike if needed. Initiate company's spill response procedures immediately. Evacuate area. Use full chemical resistant suit and approved/certified self-contained breathing apparatus worn by authorized persons.
<b>Personal Protection in Case of a Large Spill</b>	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

<b>Precautions</b>	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes
<b>Incompatibility</b>	Strong oxidizers.
<b>Storage</b>	Flammable materials should be stored in a separate safety storage cabinet or room. Highly toxic or infectious materials should be stored in a separate locked safety storage cabinet or room. Keep out of the reach of children. Not for use or storage in or around the home.

#### Section 8. Exposure Controls/Personal Protection

<b>Engineering Controls</b>	Use only in well-ventilated areas
<b>Personal Protection</b>	
	<i>Eyes</i> Splash goggles.
	<i>Body</i> Lab coat.
	<i>Respiratory</i> Wear appropriate respirator when ventilation is inadequate.
	<i>Hands</i> Gloves (impervious).
<b>Protective Clothing (Pictograms)</b>	

**Exposure Limits****Methanol**

TWA: 200 (ppm)

TWA: 200 (ppm) from OSHA (PEL) [United States]

STEL: 250 (ppm)

**2-Butoxyethanol**

TWA: 25 (ppm)

TWA: 50 (ppm) from OSHA (PEL) [United States]

Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

<b>Physical State and Appearance</b>	Liquid.	<b>Odor</b>	Characteristic.
<b>Molecular Weight</b>	Not applicable.	<b>Taste</b>	Not available.
<b>pH</b>	7.5 to 8.5 [Basic.]	<b>Color</b>	Violet.
<b>Boiling/Condensation Point</b>	150 to 220°F		
<b>Melting/Freezing Point</b>	Not available.		
<b>Critical Temperature</b>	Not available.		
<b>Instability Temperature</b>	Not available.		
<b>Specific Gravity</b>	0.93 (Water = 1)		
<b>Vapor Pressure</b>	30mm Hg @ 68°F		
<b>Vapor Density</b>	>1 (Air = 1)		
<b>Volatility</b>	99		
<b>VOC</b>	Not available.		
<b>Evaporation Rate</b>	>1		
<b>Dispersion Properties</b>	See solubility in water.		
<b>Solubility</b>	Soluble		
<b>The Product is:</b>	Flammable.		
<b>Auto-ignition Temperature</b>	Not available.		
<b>Flash Points</b>	CLOSED CUP: 15.556°C (60°F).		
<b>Flammable Limits</b>	LOWER: 2% UPPER: 12%		
<b>Fire Hazards in Presence of Various Substances</b>	Highly flammable.		
<b>Explosion Hazards in Presence of Various Substances</b>	Drums Heated By Fire Can explode		

**Section 10. Stability and Reactivity Data**

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

## Section 11. Toxicological Information

<b>Routes of Entry</b>	Absorbed through skin. Eye contact. Inhalation. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 1746 mg/kg [Rat]. (2-Butoxyethanol).
<b>Acute Effects on Humans</b>	<p><i>Eyes</i> Severe eye irritant. May cause redness, tearing, or blurred vision.</p> <p><i>Skin</i> Skin irritant. May cause redness and swelling. Prolonged or repeated contact may cause dermatitis. Harmful if absorbed through the skin.</p> <p><i>Inhalation</i> Vapors may be irritating to the mucous membranes of the nose, throat, and lungs. Excessive exposure may cause drowsiness, dizziness, loss of coordination, and fatigue.</p> <p><i>Ingestion</i> Irritating to the gastrointestinal system. May cause dizziness, headache, nausea, or possible blindness. May be fatal if swallowed.</p>
<b>Chronic Effects on Humans</b>	Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs. Severe over-exposure can result in death.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	Not available.

## Section 12. Ecological Information

<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation</b>	Not available.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.

## Section 13. Disposal Considerations

<b>Waste Information</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
<b>Waste Stream</b>	Not available.

## Section 14. Transport Information

**DOT (U.S.A)  
(Pictograms)**



**TDG Classification** Class 3: Flammable liquid.



**PIN UN, Proper Shipping Name, PG** Shipping name: FLAMMABLE LIQUIDS, N.O.S. UNNA: UN1993 PG: II

Maritime Transportation Not available.

Special Provisions for Transport Not available.

### Section 15. Other Regulatory Information and Pictograms

**WHMIS (Classification)** CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).  
WHMIS Class D-1B: Material causing immediate and serious toxic effects (TOXIC).



**Regulatory Lists** No products were found.

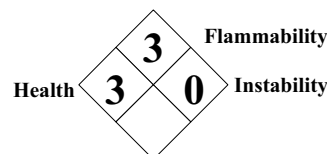
**Other Regulations** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

<b>Other Classifications</b>	<b>HCS (U.S.A.)</b>	HCS Class: Flammable liquid having a flash point lower than 37.8°C (100°F). HCS CLASS: May be toxic for the nervous system.
	<b>USA Regulatory Lists</b>	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 Pennsylvania RTK: Propylene Glycol Massachusetts RTK: Ethylene Oxide SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Methanol; 2-Butoxyethanol: immediate health hazard, delayed health hazard SARA 313 toxic chemical notification and release reporting: Methanol; 2-Butoxyethanol
	<b>DSD (EEC)</b>	R11- Highly flammable.
	<b>International Regulations Lists</b>	No products were found.

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

Health	3
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.

### Section 16. Other Information

Validated by CRushton on 3/2/2007.

Verified by CRushton.

Printed 3/23/2007.

**Information Contact Betco Corporation**  
1001 Brown Avenue  
Toledo, Ohio 43607

Notice to Read:

*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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