





# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

	Not controlled under WHMIS (Canada).	Not controlled under the HCS (United States).
WHMIS (Pictograms)	WHMIS (Classification)	HCS

## Section 1. Chemical Product and Company Identification

Product Name/ Trade name	<b>Emulsion</b>	Code	675
Synonym	Not available.	CAS #	Mixture.
Chemical Family	Not available.	Validation Date	1/12/2006
Chemical Formula	Not applicable.	Print Date	1/12/2006
Manufacturer/ Supplier	Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (800) 333-2156	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		
		<b>Protective Clothing</b> 	

## Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC <sub>50</sub> /LD <sub>50</sub>
N-Methyl-2-Pyrrolidone Dipropylene Glycol Methyl Ether	872-50-4 34590-94-8	5 - 10 1 - 5	Not available. <b>ACGIH TLV (United States).</b> TWA: 100 ppm 8 hour(s). STEL: 150 ppm 15 minute(s). <b>OSHA PEL (United States).</b> TWA: 100 ppm 8 hour(s). <b>ACGIH TLV (United States).</b> TWA: 100 ppm 8 hour(s).	Not available. Not available.
Dimethylethanolamine	108-01-0	1 - 5	<b>ACGIH TLV (United States).</b> TWA: 5 ppm 8 hour(s). STEL: 25 ppm 15 minute(s).	Not available.

### **Section 3. Hazards Identification**

<b>Potential Acute Health Effects</b>	Irritation of the product in case of eye contact: Irritant. May aggravate existing eye disorders Irritation of the product in case of skin contact: Causes drying of the Skin. May aggravate existing skin conditions.
<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>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	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.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Ingestion</b>	Contact a poison control center immediately for treatment advice. Do not induce vomiting unless instructed to do so by poison control center or doctor. Do not give anything to by mouth to an unconscious person.

### **Section 5. Fire Fighting Measures**

<b>Products of Combustion</b>	Not available.
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

### **Section 6. Accidental Release Measures**

<b>Small Spill and Leak</b>	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
<b>Large Spill and Leak</b>	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
<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. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe gas/fumes/ vapor/spray. Keep away from incompatibles such as oxidizing agents, acids, alkalis.
<b>Incompatibility</b>	Reactive with oxidizing agents, acids, alkalis.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. S2- Keep out of the reach of children. Not for use or storage in or around the home.

## Section 8. Exposure Controls/Personal Protection

**Engineering Controls** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

### Personal Protection

*Eyes* Safety glasses.

*Body* No special protective clothing is required.

*Respiratory* A respirator is not needed under normal and intended conditions of product use.

*Hands* Impervious gloves.

### Protective Clothing (Pictograms)



**Exposure Limits** See Section 2 For Applicable 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>	Not applicable.	<b>Color</b>	White to yellowish.
<b>Boiling/Condensation Point</b>	The lowest known value is 192.78°C (379°F)		
<b>Melting/Freezing Point</b>	Not available.		
<b>Critical Temperature</b>	Not available.		
<b>Instability Temperature</b>	Not available.		
<b>Specific Gravity</b>	1.0488 (Water = 1)		
<b>Vapor Pressure</b>	Not available.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>VOC</b>	301 (g/l).		
<b>Evaporation Rate</b>	<1 compared to Butyl acetate.		
<b>Dispersion Properties</b>	Not available.		
<b>Solubility</b>	Insoluble in cold water, hot water.		
<b>The Product is:</b>	May be combustible at high temperature.		
<b>Auto-ignition Temperature</b>	Not available.		
<b>Flash Points</b>	Closed cup: >176.67°C (350°F).		
<b>Flammable Limits</b>	Not available.		
<b>Fire Hazards in Presence of Various Substances</b>	Not available.		

<b>Explosion Hazards in Presence of Various Substances</b>	Not available.
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<b>Section 10. Stability and Reactivity Data</b>	
<b>Stability</b>	The product is stable.
<b>Incompatibility with Various Substances</b>	Reactive with oxidizing agents, acids, alkalis.
<b>Hazardous Decomposition Products</b>	Not available.

<b>Section 11. Toxicological Information</b>	
<b>Routes of Entry</b>	Not available.
<b>Toxicity to Animals</b>	LD50: Not available. LC50: Not available.
<b>Acute Effects on Humans</b>	
<i>Eyes</i>	Not available.
<i>Skin</i>	Irritation of the product in case of skin contact: Not available. Sensitization of the product: Not available.
<i>Inhalation</i>	Not available.
<i>Ingestion</i>	Not available.
<b>Chronic Effects on Humans</b>	Repeated skin exposure can produce local skin destruction, or dermatitis.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	Not available.

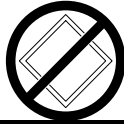
<b>Section 12. Ecological Information</b>	
<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Not available.
<b>Toxicity of the Products of Biodegradation</b>	Not available.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.

### Section 13. Disposal Considerations

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 Not applicable.

Maritime Transportation Not available.

Special Provisions for Transport Not available.

### Section 15. Other Regulatory Information and Pictograms

WHMIS (Classification) Not controlled under WHMIS (Canada).



Regulatory Lists No products were found.

Other Regulations Not available. or of its ingredients

Other Classifications

HCS (U.S.A.) Not controlled under the HCS (United States).

USA Regulatory Lists

**WARNING:** This product contains chemical(s) known to the state of California to cause cancer, birth defects or other reproductive harm: Hydrazine; N-Methyl-2-Pyrrolidone

**WARNING:** This product contains chemical(s) known to the state of California to cause birth defects or other reproductive harm.: N-Methyl-2-Pyrrolidone

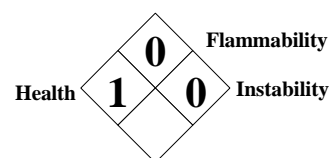
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: N-Methyl-2-Pyrrolidone  
SARA 313 toxic chemical notification and release reporting: N-Methyl-2-Pyrrolidone 7.5%

DSD (EEC) This product is not classified according to the EU regulations.

International Regulations Lists No products were found.

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

Health	1	National Fire Protection Association (U.S.A.)
Flammability	0	
Physical Hazard	0	



### Section 16. Other Information

Validated by CRushton on 1/12/2006.

Verified by CRushton.

Printed 1/12/2006.

**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 1/12/2006.

**Emulsion**

Page: 6/6

**Continued on Next Page**