




# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

	D-2B	HCS Class: Irritating substance.
WHMIS (Pictograms)	WHMIS (Classification)	HCS
<b>Section 1. Chemical Product and Company Identification</b>		
Product Name/ Trade name	<b>Deep Blue Concentrate (1:30) Dilution</b>	Code 181Diluted 1:30
Synonym	Concentrated Glass Cleaner	CAS # Not applicable.
Chemical Family	Not available.	Validation Date 3/2/2010
Chemical Formula	Not applicable.	Print Date 3/3/2010
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.	
DSL/ NDSL	All components listed unless noted elsewhere on this MSDS	
		<b>Protective Clothing</b>

<b>Section 2. Composition and Information on Ingredients</b>				
Name	CAS #	% by Weight	Exposure Limits	LC <sub>50</sub> /LD <sub>50</sub>
Water	7732-18-5	>95	Not available.	Not available.
2-Butoxyethanol	111-76-2	<1	TWA: 20 (ppm) from ACGIH (TLV) [United States] TWA: 50 (ppm) from OSHA (PEL) [United States]	ORAL (LD50): Acute: 1746 mg/kg [Rat].
Aqua Ammonia	1336-21-6	<1	TWA: 50 (ppm) TWA: 50 (ppm) from OSHA (PEL) [United States] STEL: 35 (ppm)	Not available.
Sodium Lauryl Sulfate	151-21-3	<1	Not available.	Not available.
Tetrasodium salt of ethylenediaminetetraacetic acid	64-02-8	<1	Not available.	ORAL (LD50): Acute: 3030 mg/kg [Rat].
Dye	NA	<1	Not available.	Not available.
Nonionic Surfactant	9016-45-9	<1	Not available.	Not available.
Anionic Surfactant	25155-30-0	<1	Not available.	Not available.

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

<b>Potential Acute Health Effects</b>	This product is an eye irritant.
<b>Potential Chronic Health Effects</b>	Over-exposure by inhalation may cause respiratory irritation. 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>	Avoid contact with eyes. In case of contact with eyes, rinse immediately with plenty of water. Seek medical attention if irritation persists.
<b>Skin Contact</b>	Wash contaminated skin with soap and water immediately following contact. Be sure to wash hands prior to eating, smoking or applying cosmetics. Seek medical attention if irritation persists.
<b>Inhalation</b>	May cause headache, nausea or weakness in case of long term exposure. Remove to fresh air. Seek medical attention if irritation persists.
<b>Ingestion</b>	Do not induce vomiting. Have conscious person drink several glasses of water or milk. Seek immediate medical attention.

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

<b>Products of Combustion</b>	Not applicable.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	No additional remark.
<b>Special Remarks on Explosion Hazards</b>	No additional remark.

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

<b>Small Spill and Leak</b>	Dilute with water and mop up, or absorb with an inert DRY material and place in an appropriate waste disposal container.
<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>	Gloves. Safety glasses. If contact with spilled concentrate, vapor respirator is recommended.

### **Section 7. Handling and Storage**

<b>Precautions</b>	After handling, always wash hands thoroughly with soap and water. Avoid breathing vapors or spray mists. Do not ingest.
<b>Incompatibility</b>	Incompatible with some strong acids. oxidizing materials
<b>Storage</b>	Keep out of reach of children. Keep away from food, drink and animal feeding stuffs. For Institutional and Commercial Use

## Section 8. Exposure Controls/Personal Protection

**Engineering Controls** Good general ventilation should be sufficient to control airborne levels.

### Personal Protection

**Eyes** Eye protection is generally not required when used under normal, intended conditions of product use applicable to end use dilution. Persons should consider eye protection if splashing is to occur.

**Body** No special protective clothing is required.

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

**Hands** Gloves are not generally required under normal intended conditions or product use applicable to the end use dilution. Skin should be thoroughly washed with soap and water immediately following contact. Persons with skin conditions, or persons with sensitive skin may wish to consider wearing gloves during product use.

### Protective Clothing (Pictograms)

### Exposure Limits

#### 2-Butoxyethanol

TWA: 25 (ppm)

TWA: 50 (ppm) from OSHA (PEL)

#### Aqua Ammonia

TWA: 50 (ppm)

TWA: 50 (ppm) from OSHA (PEL)

STEL: 35 (ppm)

Consult local authorities for acceptable exposure limits.

## Section 9. Physical and Chemical Properties

### Physical State and Appearance

Liquid.

### Odor

Ammoniacal.

### Molecular Weight

Not applicable.

### Taste

Not available.

### pH

10 to 11 [Basic.]

### Color

Blue.

### Boiling/Condensation Point

212 F

### Melting/Freezing Point

Not available.

### Critical Temperature

Not available.

### Instability Temperature

Not available.

### Specific Gravity

0.851 (Water = 1)

### Vapor Pressure

Not available.

### Vapor Density

(Air=1) : > 1

### Volatility

Not available.

### VOC

Not available.

### Evaporation Rate

Not available.

### Dispersion Properties

See solubility in water.

<b>Solubility</b>	Easily soluble in cold water.
<b>The Product is:</b>	Non-flammable.
<b>Auto-ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	Not applicable.

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

<b>Stability</b>	The product is stable.
<b>Incompatibility with Various Substances</b>	Incompatible with some strong acids. oxidizing materials
<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>	<b>WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.</b> Acute oral toxicity (LD50): 1746 mg/kg [Rat]. (2-Butoxyethanol). Acute toxicity of the gas (LC50): 926 ppm 4 hour(s) [Mouse]. (2-Butoxyethanol).
<b>Acute Effects on Humans</b>	<i>Eyes</i> May cause eye irritation. <i>Skin</i> Slightly irritating. May be absorbed through skin. <i>Inhalation</i> Slightly irritating to the respiratory system. <i>Ingestion</i> Hazardous in case of ingestion.
<b>Chronic Effects on Humans</b>	Over-exposure by inhalation may cause respiratory irritation. Repeated skin exposure can produce local skin destruction, or dermatitis.
<b>Special Remarks on Toxicity to Animals</b>	No additional remark.
<b>Special Remarks on Chronic Effects on Humans</b>	No additional remark.

### **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.

**Special Remarks on the Products of Biodegradation** No additional remark.

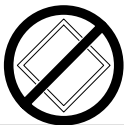
### Section 13. Disposal Considerations

**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** Not controlled under TDG (Canada).



**PIN UN, Proper Shipping Name, PG** Not applicable.

**Maritime Transportation** Not available.

**Special Provisions for Transport** Not applicable.

### Section 15. Other Regulatory Information and Pictograms

**WHMIS (Classification)** D-2B



**Regulatory Lists** No products were found.

**Other Regulations** Not available. or of its ingredients

**Other Classifications**

**HCS (U.S.A.)** HCS Class: Irritating substance.

**USA Regulatory Lists** No components found on California Prop 65

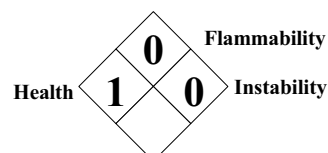
At (1:30) dilution, components are present at less than deminimus concentration, therefore are not subject to reporting under SARA 313.

**DSD (EEC)**

**International Regulations Lists** No products were found.

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

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



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 12/2/2004.

Verified by CRushton.

Printed 8/22/2005.

**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.*

Validated on 12/2/2004.

**Deep Blue Concentrate (1:30) Dilution**

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