



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
Section 1. Chemical Product and Company Identification		
Product Name/ Trade name	Deep Blue Concentrate (1:30) Dilution	Code 181Diluted 1:30
Synonym	Concentrated Glass Cleaner	CAS # Not applicable.
Chemical Family	Not available.	Validation Date 12/2/2004
Chemical Formula	Not applicable.	Print Date 8/22/2005
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.	
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
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 ethylendiaminetetraacetic 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

Potential Acute Health Effects	This product is an eye irritant.
Potential Chronic Health Effects	Over-exposure by inhalation may cause respiratory irritation. 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	Avoid contact with eyes. In case of contact with eyes, rinse immediately with plenty of water. Seek medical attention if irritation persists.
Skin Contact	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.
Inhalation	May cause headache, nausea or weakness in case of long term exposure. Remove to fresh air. Seek medical attention if irritation persists.
Ingestion	Do not induce vomiting. Have conscious person drink several glasses of water or milk. Seek immediate medical attention.

Section 5. Fire Fighting Measures

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

Section 6. Accidental Release Measures

Small Spill and Leak	Dilute with water and mop up, or absorb with an inert DRY material and place in an appropriate waste disposal container.
Large Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Personal Protection in Case of a Large Spill	Gloves. Safety glasses. If contact with spilled concentrate, vapor respirator is recommended.

Section 7. Handling and Storage

Precautions	After handling, always wash hands thoroughly with soap and water. Avoid breathing vapors or spray mists. Do not ingest.
Incompatibility	Incompatible with some strong acids. oxidizing materials
Storage	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.		

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

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substances	Incompatible with some strong acids. oxidizing materials
Hazardous Decomposition Products	Not available.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 1746 mg/kg [Rat]. (2-Butoxyethanol). Acute toxicity of the gas (LC50): 926 ppm 4 hour(s) [Mouse]. (2-Butoxyethanol).
Acute Effects on Humans	<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.
Chronic Effects on Humans	Over-exposure by inhalation may cause respiratory irritation. 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 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.

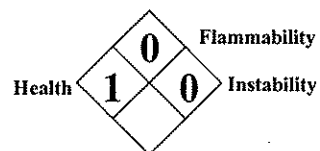
DSD (EEC)

International Regulations Lists No products were found.

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

Health	1
Flammability	0
Physical Hazard	0

National Fire Protection Association (U.S.A.)



Specific Hazard

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 12/2/2004.

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

Page: 6/6