Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

WHMIS (Pictograms)	WHMIS (Classification)	HCS
	WHMIS Class D-2B: Material causing other toxic effects (TOXIC).	HCS Class: Irritating substance.

Section 1. Chemical Product and Company Identification

Product Name/ Trade name	**Deep Blue**
Synonym	Glass Cleaner
Chemical Family	Not available.
Chemical Formula	Not applicable.
Manufacturer/ Supplier	Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (419) 241-2156
TSCA	**TSCA Inventory: All components listed or are exempt from listing.**
DSL/ NDSL	**All components listed unless noted elsewhere on this MSDS**

Code	182
CAS #	Not applicable.
Validation Date	**3/23/2007**
Print Date	3/23/2007
In Case of Emergency	Chemtrec (800) 424-9300

Protective Clothing

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC_{50}/LD_{50}
2-Butoxyethanol	111-76-2	5 - 10	**ACGIH (United States).** TWA: 20 ppm **OSHA (United States).** TWA: 50 ppm	ORAL (LD50): Acute: 1746 mg/kg [Rat].
Aqua Ammonia	1336-21-6	1 - 5	TWA: 50 ppm **OSHA (United States).** TWA: 50 ppm STEL: 35 ppm	Not available.

Section 3. Hazards Identification

Potential Acute Health Effects	Corrosive to skin and eyes on contact. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.
Potential Chronic Health Effects	Prolonged exposure may result in skin burns and ulcerations. Repeated or prolonged exposure to the substance can produce mucous membranes damage. May aggravate existing respiratory conditions. Repeated or prolonged exposure to the substance can produce blood disorders.Based on Animal data. Relevance to humans is not yet determined. Repeated or prolonged exposure to the substance can produce kidney damage.Based on Animal Data. Effects on Humans has yet to be determined. Repeated or prolonged exposure to the substance can produce nervous system damage.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Section 4. First Aid Measures

Eye Contact	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 immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Contact a poison control center immediately for treatment adivce. Do not induce vomiting unless instructed to do so be poison control center or doctor. Take small sips of water if able to swallow. Do not give anything to by mouth to an unconscious person.

Section 5. Fire Fighting Measures

Products of Combustion	Not available.
Fire Fighting Media and Instructions	Non-flammable substance.
Special Remarks on Fire Hazards	N/A
Special Remarks on Explosion Hazards	N/A

Section 6. Accidental Release Measures

Small Spill and Leak	safety glasses with out perforated sides are appropriate for most conditions. If using in large quantities , face shield recommended.
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	Splash goggles. Boots. Gloves.

Section 7. Handling and Storage

Precautions	Avoid contact with skin and eyes May react or be incompatible with oxidizing materials. Keep away from incompatibles. Ensure that eyewash station and safety shower is proximal to the work-station location. Avoid breathing vapors or spray mists.
Incompatibility	oxidizing agents
Storage	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	Good general ventilation should be sufficient to control airborne levels.
Personal Protection	
Eyes	Splash goggles.
Body	No special protective clothing is required.
Respiratory	A respirator is not needed under normal and intended conditions of product use. Wear appropriate respirator when ventilation is inadequate.
Hands	Gloves (impervious).
Protective Clothing (Pictograms)	

Exposure Limits	**Aqua Ammonia** TWA: 50 (ppm) TWA: 50 (ppm) from OSHA (PEL) STEL: 35 (ppm) **2-Butoxyethanol** TWA: 25 (ppm) TWA: 50 (ppm) from OSHA (PEL) Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.
Molecular Weight	Not applicable.
pH	12.3 [Basic.]

Odor	Ammoniacal.
Taste	Not available.
Color	Blue.

Boiling/Condensation Point	212 F
Melting/Freezing Point	Not available.
Critical Temperature	Not available.
Instability Temperature	Not available.
Specific Gravity	0.964 (Water = 1)
Vapor Pressure	Not available.
Vapor Density	>1 (Air = 1)
Volatility	>99
VOC	Not available.
Evaporation Rate	>1
Dispersion Properties	See solubility in water.
Solubility	Easily soluble in cold water.
The Product is:	May be combustible at high temperature.
Auto-ignition Temperature	Not available.
Flash Points	Not available.
Flammable Limits	Not available.
Fire Hazards in Presence of Various Substances	No specific information is available in our database regarding the flammability of this product in presence of various materials.
Explosion Hazards in Presence of Various Substances	Non-explosive in presence of open flames and sparks, of heat.

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substances	oxidizing agents
Hazardous Decomposition Products	Will not occur

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	
Eyes	Very hazardous in case of eye contact (irritant). Hazardous in case of eye contact (corrosive). Inflammation of the eye is characterized by redness, watering, and itching.
Skin	Very hazardous in case of skin contact (irritant). Hazardous in case of skin contact (corrosive). Skin contact may produce burns. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Inhalation	Hazardous in case of inhalation. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Over-exposure by inhalation may cause respiratory irritation.
Ingestion	Very hazardous in case of ingestion. May be fatal if swallowed. May cause burns to mouth, throat, and stomach.
Chronic Effects on Humans	Prolonged exposure may result in skin burns and ulcerations. Repeated or prolonged exposure to the substance can produce mucous membranes damage. May aggravate existing respiratory conditions. Repeated or prolonged exposure to the substance can produce blood disorders.Based on Animal data. Relevance to humans is not yet determined. Repeated or prolonged exposure to the substance can produce kidney damage.Based on Animal Data. Effects on Humans has yet to be determined. Repeated or prolonged exposure to the substance can produce nervous system damage.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional remark.

Section 12. Ecological Information

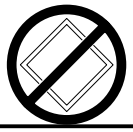
Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation	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 a TDG controlled material.

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)

WHMIS Class D-2B: Material causing other toxic effects (TOXIC).

Regulatory Lists	No products were found.
Other Regulations	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

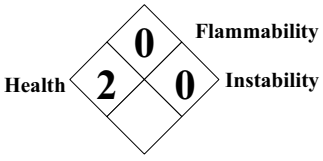
Other Classifications

HCS (U.S.A.)	HCS Class: Irritating substance.
USA Regulatory Lists	SARA 302/304/311/312 extremely hazardous substances: Aqua Ammonia SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Aqua Ammonia: fire, immediate health hazard; 2-Butoxyethanol: immediate health hazard, delayed health hazard SARA 313 toxic chemical notification and release reporting: 2-Butoxyethanol
DSD (EEC)	
International Regulations Lists	No products were found.

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

Health	*	2
Flammability		0
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 3/23/2007.

Verified by CRushton.

Printed 3/23/2007.

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

Notice to Reade

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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