



Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

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

Section 1. Chemical Product and Company Identification

Product Name/ Trade name	Deep Blue (Aerosol)	Code	090
Synonym	Glass Cleaner	CAS #	Mixture.
Chemical Family	N/A	Validation Date	3/20/2004
Chemical Formula	N/A	Print Date	3/27/2004
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
1) Liquified Petroleum Gas	68476-85-7	5-10	TWA: 1000 (ppm) TWA: 1000 (ppm) from OSHA (PEL) [United States]	Not available.
2) Ammonium Hydroxide	1336-21-6	0-5	TWA: 50 (ppm) TWA: 50 (ppm) from OSHA (PEL) [United States] STEL: 35 (ppm)	Not available.
3) Propylene Glycol	57-55-6	0-5	Not available.	ORAL (LD50): Acute: 5000 mg/kg [Rat].
4) 2-Butoxyethanol	111-76-2	0-5	TWA: 20 (ppm) from ACGIH (TLV) [United States] TWA: 50 (ppm) from OSHA (PEL) [United States]	ORAL (LD50): Acute: 1746 mg/kg [Rat].
5) Sodium Nitrite	7632-00-0	<1	Not available.	Not available.
6) Nonionic Surfactant	9036-19-5	0-5	Not available.	Not available.

Section 3. Hazards Identification

Potential Acute Health Effects	This product is an eye irritant.
Potential Chronic Health Effects	Severe over-exposure can produce lung damage, choking, unconsciousness or death.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Section 4. First Aid Measures

Eye Contact	Flush eyes with large quantities of water. Seek medical attention if irritation persists.
Skin Contact	Flush with large quantities of water. Seek medical attention if irritation persists.
Inhalation	Get to fresh air. Seek medical attention if irritation persists.
Ingestion	Drink two glasses of water. Do not induce vomiting. Seek medical attention immediately

Section 5. Fire Fighting Measures

Products of Combustion	Not Available
Fire Fighting Media and Instructions	Water, CO2, dry chemical.
Special Remarks on Fire Hazards	N/A
Special Remarks on Explosion Hazards	Heated cans may burst.

Section 6. Accidental Release Measures

Small Spill and Leak	N/A
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. Splash goggles.

Section 7. Handling and Storage

Precautions	After handling, always wash hands thoroughly with soap and water. Avoid contact with skin and eyes. Keep away from heat. Keep away from heat.
Incompatibility	None known.
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 Safety glasses.

Body No special protective clothing is required.

Respiratory Wear appropriate respirator when ventilation is inadequate.

Hands Gloves.

Protective Clothing (Pictograms)



Exposure Limits

Liquified Petroleum Gas

TWA: 1000 (ppm)

TWA: 1000 (ppm) from OSHA (PEL)

Ammonium Hydroxide

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	Odor	Characteristic.
Molecular Weight	Not applicable.	Taste	Not available.
pH	10.5 to 11.5 [Basic.]	Color	Off-white.
Boiling/Condensation Point	Not available.		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	Not available.		
Vapor Pressure	50 psig @ 68°F		
Vapor Density	>1 (Air = 1)		
Volatility	99		
VOC	Not available.		
Evaporation Rate	<1 compared to Butyl acetate.		
Dispersion Properties	Dispersed in cold water, hot water, methanol, diethyl ether, n-octanol, acetone.		
Solubility	Soluble		
The Product is:	COMBUSTIBLE.		
Auto-ignition Temperature	Not Applicable		
Flash Points	Not Applicable		
Flammable Limits	LOWER: 1.8% UPPER: 8.4%		
Fire Hazards in Presence of Various Substances	COMBUSTIBLE.		
Explosion Hazards in Presence of Various Substances	Heated Cans May burst		

Section 10. Stability and Reactivity Data

Stability	Stable
Incompatibility with Various Substances	None known.
Hazardous Decomposition Products	not available

Section 11. Toxicological Information

Routes of Entry	Skin contact. INHALATION Ingestion. Eye Contact
Toxicity to Animals	not available
Acute Effects on Humans	
<i>Eyes</i>	Eye irritant. Liquid and mist may damage the eyes causing corneal injury.
<i>Skin</i>	Skin irritant. May cause moderate redness and swelling.
<i>Inhalation</i>	May be irritating to mucous membranes of the nose, throat, and lungs.
<i>Ingestion</i>	May cause dizziness, headache, nausea, vomiting, and diarrhea.
Chronic Effects on Humans	Severe over-exposure can produce lung damage, choking, unconsciousness or death.
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	Not Available
Toxicity of the Products of Biodegradation	Not Applicable
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).



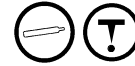
PIN UN, Proper Shipping Name, PG Not applicable.

Maritime Transportation Not available.

Special Provisions for Transport Not applicable.

Section 15. Other Regulatory Information and Pictograms

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



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

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Liquified Petroleum Gas: fire; 2-Butoxyethanol: immediate health hazard, delayed health hazard; Sodium Nitrite
SARA 313 toxic chemical notification and release reporting: 2-Butoxyethanol; Sodium Nitrite

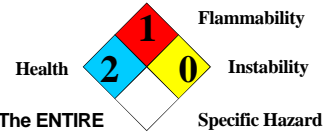
DSD (EEC)

International Regulations Lists No products were found.

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

Health	2
Flammability	1
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 3/20/2004.

Verified by CRushton.

Printed 3/27/2004.

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 3/20/2004.

Deep Blue (Aerosol)

Page: 5/5

Continued on Next Page