



Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

	CLASS D-2B: Material causing other toxic effects (TOXIC). WHMIS Class E: Corrosive liquid.	Class: Irritating substance. HCS Class: Corrosive liquid.
WHMIS (Pictograms)	WHMIS (Classification)	HCS
Section 1. Chemical Product and Company Identification		
Product Name/ Trade name	TB Plus Spray	Code 093
Synonym	Phenolic Disinfectant/Deodorant	CAS # Mixture.
Chemical Family	Not available.	Validation Date 3/20/2004
Chemical Formula	Not applicable.	Print Date 3/27/2004
Manufacturer/ Supplier	Betco Corporation 1001 Brown Avenue Toledo, Oh 43607 (419) 241-2156	In Case of Emergency Chemtrec (800) 424-9300
TSCA	TSCA Inventory: All components listed or are exempt from listing.	Protective Clothing 
DSL/ NDSL	All components listed unless noted elsewhere on this MSDS	

Section 2. Composition and Information on Ingredients				
Name	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
1) Ethyl Alcohol	64-17-5	44.3	TWA: 1000 (ppm) TWA: 1000 (ppm) from OSHA (PEL) [United States]	ORAL (LD50): Acute: 7060 mg/kg [Rat].
2) Liquified Petroleum Gas	68476-85-7	20-25	TWA: 1000 (ppm) TWA: 1000 (ppm) from OSHA (PEL) [United States]	Not available.
3) Ammonium Hydroxide	1336-21-6	0-5	TWA: 50 (ppm) TWA: 50 (ppm) from OSHA (PEL) [United States]	Not available.
4) Propylene Glycol	57-55-6	0-5	STEL: 35 (ppm) Not available.	ORAL (LD50): Acute: 5000 mg/kg [Rat].
5) Quaternary Ammonium Chloride	68391-01-5	0.33	Not available.	Not available.
6) Sodium Nitrite	7632-00-0	0.3	Not available.	Not available.
7) O-Phenylphenol	90-43-7	0.25	Not available.	Not available.

Section 3. Hazards Identification	
Potential Acute Health Effects	Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Slightly hazardous in case of inhalation. Non-sensitizer for skin. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Potential Chronic Health Effects	Over-exposure by inhalation may cause respiratory irritation. Prolonged exposure may result in skin burns and ulcerations.
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	Do NOT induce vomiting unless directed to do so by medical personnel. Have conscious person drink egg whites, gelatin solution, or if these are not available drink large quantities of water. Seek immediate medical attention.

Section 5. Fire Fighting Measures

Products of Combustion	Not available.
Fire Fighting Media and Instructions	Foam, dry chemical, CO2, water.
Special Remarks on Fire Hazards	Wear self-contained breathing apparatus.
Special Remarks on Explosion Hazards	Heated cans may burst.

Section 6. Accidental Release Measures

Small Spill and Leak	Safety glasses 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. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Section 7. Handling and Storage

Precautions	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 ingest. Do not breathe gas/fumes/ vapor/spray. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes
Incompatibility	oxidizing agents reducing agents Incompatible with ammonia.
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	Lab coat.
Respiratory	Not applicable.
Hands	Gloves.
Protective Clothing (Pictograms)	

Exposure Limits**Ethyl Alcohol**

TWA: 1000 (ppm)

TWA: 1000 (ppm) from OSHA (PEL) [United States]

Liquified Petroleum Gas

TWA: 1000 (ppm)

TWA: 1000 (ppm) from OSHA (PEL) [United States]

Ammonium Hydroxide

TWA: 50 (ppm)

TWA: 50 (ppm) from OSHA (PEL) [United States]

STEL: 35 (ppm)

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Odor	Floral.
Molecular Weight	Not applicable.	Taste	Not available.
pH	Not available.	Color	Colorless.
Boiling/Condensation Point	N/A		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature			
Specific Gravity	Not available.		
Vapor Pressure	60 psig @ 70°F		
Vapor Density	>1 (Air = 1)		
Volatility	Not available.		
VOC	Not available.		
Evaporation Rate	>1		
Dispersion Properties	Not available.		
Solubility	Not available.		
The Product is:	May be combustible at high temperature.		
Auto-ignition Temperature	Not available.		
Flash Points	Not available.		
Flammable Limits	LOWER: 1.8% UPPER: 8.5%		
Fire Hazards in Presence of Various Substances	Not available.		
Explosion Hazards in Presence of Various Substances	Containers may explode when heated.		

Section 10. Stability and Reactivity Data

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

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 5000 mg/kg [Rat]. (Propylene Glycol).
Acute Effects on Humans	Eyes Very hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching. Skin Very hazardous in case of skin contact (irritant). Non-sensitizer for skin. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Inhalation Slightly hazardous in case of inhalation. Ingestion Very hazardous in case of ingestion.
Chronic Effects on Humans	Over-exposure by inhalation may cause respiratory irritation. Prolonged exposure may result in skin burns and ulcerations.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.

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	Not available.

Section 13. Disposal Considerations

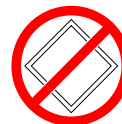
Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	Not available.

Section 14. Transport Information

DOT (U.S.A)
(Pictograms)



TDG Classification 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) CLASS D-2B: Material causing other toxic effects (TOXIC).
WHMIS Class E: Corrosive liquid.



Regulatory Lists No products were found.

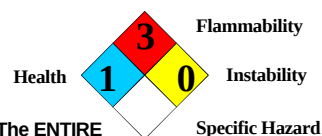
Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications	HCS (U.S.A.)	Class: Irritating substance. HCS Class: Corrosive liquid.
	USA Regulatory Lists	California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: O-Phenylphenol SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Liquified Petroleum Gas: fire; Sodium Nitrite SARA 313 toxic chemical notification and release reporting: Sodium Nitrite
	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	2
Flammability	3
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.

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