





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	Forest 5	Code	307
Synonym	Cleaner/Degreaser/Deodorant	Version Number	3.0
Chemical Family	Not available.	Validation Date	11/20/2009
Chemical Formula	Not applicable.	Print Date	11/20/2009
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
2-Butoxyethanol	111-76-2	1 - 5	ACGIH (United States). TWA: 20 ppm OSHA (United States). TWA: 50 ppm	ORAL (LD50): Acute: 1746 mg/kg [Rat].
Tetrasodium salt of ethylenediaminetetraacetic acid	64-02-8	0 - 5	Not available.	ORAL (LD50): Acute: 3030 mg/kg [Rat].

Section 3. Hazards Identification

Potential Acute Health Effects	This product may irritate eyes upon contact. Irritating to the mucous membranes of the nose, throat and lungs.
Potential Chronic Health Effects	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	Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention.
Skin Contact	Rinse skin with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for further treatment advice.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration., preferably mouth to mouth if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Call a poison control center immediately for treatment advice. Have person sip a glass of water if able to swallow. Do NOT induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person

Section 5. Fire Fighting Measures

Products of Combustion Not available.

Fire Fighting Media and Instructions N/A

Special Remarks on Fire Hazards N/A

Special Remarks on Explosion Hazards N/A

Section 6. Accidental Release Measures

Small Spill and Leak Absorb with an inert 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 Splash goggles. Full suit. Boots. Gloves.

Section 7. Handling and Storage

Precautions After handling, always wash hands thoroughly with soap and water. Avoid contact with skin and eyes.

Incompatibility oxidizing agents alkalis

Storage Keep out of reach of children. 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

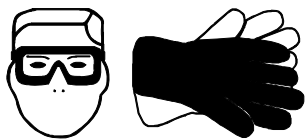
Eyes Splash goggles.

Body Long Pants and Long Sleeves to avoid skin contact.

Respiratory Wear appropriate respirator when ventilation is inadequate.

Hands Gloves (impervious).

Protective Clothing (Pictograms)



Exposure Limits **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 Pleasant.

Molecular Weight Not applicable.

Taste Not available.

pH 11.5 to 12.5 [Basic.]

Color Clear to Straw color.

Boiling/Condensation Point 213°F initial

Melting/Freezing Point Not available.

Critical Temperature Not available.

Instability Temperature	Not available.
Specific Gravity	1.0116 (Water = 1)
Vapor Pressure	20mm Hg @ 68°F
Vapor Density	>1 (Air = 1)
Volatility	90
VOC	Not available.
Evaporation Rate	<1 compared to Water
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	CLOSED CUP: >98.889°C (210°F).
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	Not applicable

Section 10. Stability and Reactivity Data

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

Section 11. Toxicological Information

Routes of Entry	Eye Contact Ingestion. INHALATION Skin contact.
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	<p><i>Eyes</i> Severe eye irritant. Liquid and mist may cause corneal injury.</p> <p><i>Skin</i> Skin irritant. Prolonged or repeated exposure may cause moderate reddening or swelling.</p> <p><i>Inhalation</i> Vapors may be irritating to mucous membranes of the nose, throat, and lungs.</p> <p><i>Ingestion</i> May be irritating to the mouth, throat, esophagus, and gastrointestinal system. Vomiting and diarrhea expected with large doses.</p>
Chronic Effects on Humans	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.

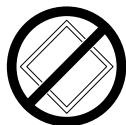
Section 13. Disposal Considerations

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) 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 311/312 MSDS distribution - chemical inventory - hazard identification: 2-Butoxyethanol: immediate health hazard, delayed health hazard
SARA 313 toxic chemical notification and release reporting: 2-Butoxyethanol

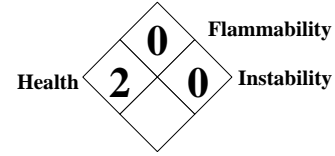
DSD (EEC)

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. Specific Hazard

Section 16. Other Information

Validated by CRushton on 11/20/2009.

Verified by CRushton.

Printed 11/20/2009.

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 11/20/2009.

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