Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

WHMIS (Pictograms)	**Class E: Corrosive liquid.** **WHMIS (Classification)**	Toxic Corrosive Material **HCS**

Section 1. Chemical Product and Company Identification

Product Name/ Trade name	**Built Detergent**
Synonym	Built Laundry Detergent
Chemical Family	Not available.
Chemical Formula	Not applicable.
Manufacturer/ Supplier	Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (800) 333-2156
TSCA	**TSCA Inventory: All components listed or are exempt from listing.**
DSL/ NDSL	**All components listed unless noted elsewhere on this MSDS**

Code	472
Version Number	1.00
Validation Date	**11/8/2010**
Print Date	11/8/2010
In Case of Emergency	Manufacturer 24 Hour Emergency Number CHEMTREC (800) 424-9300

Protective Clothing

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC_{50}/LD_{50}
Sodium Hydroxide	1310-73-2	25 - 35	**OSHA (United States).** TWA: 2 mg/m^3	ORAL (LD50): Acute: 140 mg/kg [Rat].
b-Alanine, N-(2-carboxyethyl)_N-3(decyloxy)prc monosodium salt	64972-19-6	5 - 10	Not available.	Not available.
2-Ethylhexyliminodipropionioc acid	68610-74-2	1 - 5	Not available.	Not available.
Polyglycoside Surfactant	110615-47-9	1 - 5	Not available.	Not available.
Sodium Gluconate	527-07-1	1 - 5	Not available.	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. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe over-exposure can result in death.

Potential Chronic Health Effects

CARCINOGENIC EFFECTS Not available.
MUTAGENIC EFFECTS Not available.
TERATOGENIC EFFECTS Not available.
DEVELOPMENTAL TOXICITY Not available.
Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

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. Cold water may be used. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Section 5. Fire Fighting Measures

Products of Combustion	Not available.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

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	Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on 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 locked up. Keep container dry. 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. Never add water to this product. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, metals.
Incompatibility	Reactive with oxidizing agents, metals.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	
Eyes	Face shield.
Body	Full suit.
Respiratory	Wear appropriate respirator when ventilation is inadequate.
Hands	Impervious gloves.

Protective Clothing (Pictograms)	
Exposure Limits	See Section 2 For Applicable Exposure Limits

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.
Molecular Weight	Not applicable.
pH	13 to 14
Boiling/Condensation Point	The lowest known value is 100°C (212°F) (Water).
Melting/Freezing Point	May start to solidify at 0°C (32°F) based on data for: Water.
Critical Temperature	Not available.
Instability Temperature	Not available.
Specific Gravity	1.2916 (Water = 1)
Vapor Pressure	Not available.
Vapor Density	Not available.
Volatility	Not available.
VOC	Not available.
Evaporation Rate	<1 compared to Butyl acetate.
Dispersion Properties	See solubility in water, methanol, acetone.
Solubility	Easily soluble in methanol, acetone. Soluble in cold water, hot 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	Not available.
Explosion Hazards in Presence of Various Substances	Not available.

Odor	Pleasant.
Taste	
Color	Yellow.

Section 10. Stability and Reactivity Data

Stability	
Incompatibility with Various Substances	Reactive with oxidizing agents, metals.
Hazardous Decomposition Products	

Section 11. Toxicological Information

Routes of Entry	Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 140 mg/kg [Rat]. (Sodium Hydroxide).
Acute Effects on Humans	
Eyes	Corrosive to eyes.
Skin	Corrosive to skin on contact. Skin contact may produce burns.
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	May be fatal if swallowed. May cause burns to mouth, throat and stomach.
Chronic Effects on Humans	**CARCINOGENIC EFFECTS** Not available. **MUTAGENIC EFFECTS** Not available. **TERATOGENIC EFFECTS** Not available. **DEVELOPMENTAL TOXICITY** Not available. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.
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	Not available.
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	8

PIN UN, Proper Shipping Name, PG	Shipping name: Corrosive liquid, n.o.s. UNNA: UN1760 PG: II
Maritime Transportation	Not available.
Special Provisions for Transport	Not available.

Section 15. Other Regulatory Information and Pictograms

WHMIS (Classification)	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.)**	Toxic Corrosive Material
	USA Regulatory Lists	SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Sodium Hydroxide: Immediate (Acute) Health Hazard
	DSD (EEC)	R22- Harmful if swallowed. R34- Causes burns.
	International Regulations Lists	No products were found.

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

Health	3
Flammability	0
Physical Hazard	1

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 11/8/2010.

Verified by CRushton.

Printed 11/8/2010.

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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