

## Material Safety Data Sheet

WHMIS (Pictogra	ms) WHM IS (Classification)		нсѕ
9	CLASS E: Corrosive liquid.	Class: Corros	ive material
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Product Name/ Trade	Betco High Foam Chlorinated Degreaser	Code	SP9184
Synonym	Chlorinated Degreaser	CAS#	Mixture
Chemical Family	Not available.	Validation Date	2/21/2003
Chemical Formula	Not applicable.	Print Date	2/21/2003
Manufacturer/Supplier	Betco Corporation 1001 Brown Avenue Toledo, Oh 43607 (419) 241-2156	In Case of Che Emergency	mtrec (800) 424-9300
TSCA	TSCA Inventory: All components listed or are exempt from listing.		
DSL	DSL: All components listed unless noted elsewhere on this M SDS	Pr €	otective Clothing

Name	CAS#	% by Weight	Exposure Limits	L C <sub>50</sub> /L D <sub>50</sub>
1) Water	7732-18-5	45-50	Not available.	Not available.
2) Sodium Hypochlorite	7681-52-9	0-5	Not available.	Not available.
3) Potassium Hydroxide	1310-58-3	0-5	Not available.	Not available.
4) Sodium Silicate	1344-09-8	0-5	Not available.	Not available
5) Sodium Lauroyl Sarcosinate	137-16-6	5-10	Not available.	Not available
6) Polycarboxylic Acid	N/A	<1	Not available.	Not available.
7) Nonionic Surfactant	61788-90-7	0-5	Not available.	ORAL (LD50): Acute: 4610 mg/kg [Rat].
8) Soda Ash	497-19-8	0-5	Not available.	Not available.
9) Surfactant	119345-04-9	0-5	Not available.	Not available.
10) Potassium Silicate	10006-28-7	0-5	Not available.	Not available.

## Section 3. Hazards Identification

Potential Acute Health Effects Corrosive to eyes and skin. Eye contact can result in corneal damage or blindness. Skin contact may produce burns. Workers whith the following conditions warrant particular attention: Persons with

existing respiratory aliments such as asthma or similar should avoid contact with this product. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.

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Potential Chronic Health

Effects

Over-exposure by inhalation may cause respiratory irritation. Prolonged exposure may result in skin burns and ulcerations. Repeated or prolonged contact with spray mist may produce chronic eye

irritation and severe skin irritation.

Carcinogenic Effects

Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Section 4. Firs	i Aid Measures
Eye Contad	Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Check for and remove any contact lenses, after the first 5 minutes, then continue rinsing the eye. Seek Immediate medical attention.
Skin Contact	Flush with plenty of water for at least 15 minutes. Seek medical attention.
inhalation	Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform mouth-to-mouth resuscitation. SEEK IMMEDIATE MEDICAL ATTENTION
Ingestion	Do not induce vomiting. Have conscious person drink several glasses of water or milk. NEVER give an unconscious person anything to ingest. SEEK IMMEDIATE MEDICAL ATTENTION

Section 5. Fire Figi	iting Measures
Products of Combustion	Chlorine
Fire Fighting M edia 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.

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	Corrosive liquid. Poisonous liquid.  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.
Personal Protection in Ca a Large Spill	se of Splash goggles. Full suit. Boots. Gloves.

Section 7. Hand	fling and Storage
Precautions	Keep locked up. Keep container dry. Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes Keep away from incompatibles such as oxidizing agents, acids.
Incompalibility	Extremely reactive or incompatible with oxidizing agents, acids. Extremely incompatible with ammonia. Incompatible with copper alloys, incompatible with iron.
Storage	Corrosive materials should be stored in a separate safety storage cabinet or room. Keep container in a cool, well-ventilated area. Keep away from incompatibles. Must be stored in a dry location. Not for use or storage in or around the home. Keep out of the reach of children.

Section 8, Exposu	re Controls/Personal Protection
Engineering Controls	If user operations generate dust, tume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Local exhaust ventilation should be provided.
Personal Protection	
1	Eyes Splash goggles or Face shield.
E	Body Long Sleeves and Pants or overalls to avoid skin contact.
Respira	tory Be sure to use a MSHA/NIOSH approved respirator or equivalent. Respirator with chlorine cartridge.
Ha	nds Gloves, Butyl rubber.

Protective Clothing (Pictograms)



Exposure Limits

Not available.

Section 9. Physical	and Chemical Properties			
Physical State and Appearance	Liquid.	Odor	Characteristic.	
Molecular Weight	Not applicable.	Taste		
РΗ	13 to 14 [Basic.]	Color	Yellowish. (Light.)	
Boiling/Condensation Point	>100°C (212°F)			
M etting/Freezing Point	Not avaliable.			
Critical Temperature	Not available.		· · · · · · · · · · · · · · · · · · ·	
Instability Temperature	Not available.			
Specific Gravity	1.16 (Water = 1)			
Vapor Pressure	2.4 kPa (@ 20°C)			
Vapor Density	>1 (Air = 1)	<del></del>		
Volatility	Not available.		· · · · · · · · · · · · · · · · · · ·	
voc	Not available.	,		
Evaporation Rate	<1 compared to Butyl acetate.			· · · · · · · · · · · · · · · · · · ·
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Dispersion Properties	See solubility in water.			
Solubility	Easily soluble in cold water, hot 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	Not available.		<del>*************************************</del>	_
Explosion Hazardsin Presence of Various Substances	Risks of explosion of the product in presence o Risks of explosion of the product in presence o	f mechanica f static disci	al impact: Not available, harge: Not available.	

Stability	The product is stable.
incompatibility with Various Substances	Extremely reactive or incompatible with oxidizing agents, acids. Extremely incompatible with ammonia incompatible with copper alloys, incompatible with iron.
Hazardous Decomposition Products	Chlorine: Hypochlorus Acid

From: Laura Gorr

Section 11. Toxicolog	ilcal Information
Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animais	Acute oral toxicity (LD50): 3.7 mg/kg [Rat]. (Sodium 2-ethythexyl suffate ).
Acute Effects on Humans	
Eyes	Extremely hazardous in case of eye contact (irritant, corrosive). Inflammation of the eye is characterized by redness, watering, and itching. Eye contact can result in corneal damage or blindness.
Skin	Very hazardous in case of skin contact (corrosive, irritant). Skin contact may produce burns. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, bijstering.
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.
	Very hazardous in case of ingestion. May be fatal if swallowed. May cause burns to mouth, throat, and stomach.
	Over-exposure by inhalation may cause respiratory irritation. Prolonged exposure may result in skin burns and ulcerations. Repeated or prolonged contact with spray mist may produce chronic eye Irritation and severe skin irritation.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.

Section 12. Ecologic	alinformation
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.

Waste Stream	Not available.
Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Section 13, Dispos	al Considerations.

## DOT (U.S.A) (Pictograms) TDG Classification Class 8: Corrosive material PIN UN, Proper Shipping Shipping name: CORROSIVE LIQUIDS, N.O.S. (Sodium Hypochlorite, Potassium Hydroxide) UNNA: 1760 PG: II

Maritime Transportation

Not available.

Special Provisions for

Transport

Not available.

Section 15, Other F	tenulatory laform	ation and Pictograms		
WHM IS (Classification)	CLASS E: Corrosive liqu			
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Regulatory Lists	No products were	No products were found.		
Other Regulations	OSHA: Hazardous	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).		
Other Classifications	HCS(U.S.A.)	Class: Corrosive material		
	USA Regulatory Lists			
		SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Potassium Hydroxide: immediate health hazard		
İ	DSD (EEC)	,		
	International Regulations Lists	No products were found.		
H azar dous M ater ial Information System (U.S.A.)	Elsumrabitily		Flammability Health Reactivity	
The Hazard Ranking systems pr MSDS must be consulted to de	esented on this MSDS pro termine any specific hazar	ovide only a quick reference for hazard information. T rds, First Ald measures, and PPE associated with this	The ENTIRE Specific Hazard is product.	

Section 16, Othe	Tinformation	AND THE PARTY OF T		
Validated by CRushton on 2/21/2003.		Verified by CRushton. Printed 2/21/2003.		
Information Contact	Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607			
Notice to Render  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 2/21/2003.

Betco High Foam Chlorinated Degreaser

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