




Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

	WHMIS CLASS E: Corrosive liquid.	HCS CLASS: Corrosive liquid.
WHMIS (Pictograms)	WHMIS (Classification)	HCS

Section 1. Chemical Product and Company Identification

Product Name/ Trade name	Tile Clean	Code	119
Synonym	Deep Cleansing Hard Tile Cleaner	CAS #	Not applicable.
Chemical Family	Not available.	Validation Date	3/22/2004
Chemical Formula	Not applicable.	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) Citric Acid	77-92-9	5-10	Not available.	Not available.
2) Phosphoric Acid	7664-38-2	0-5	TWA: 1 (mg/m ³) TWA: 1 (mg/m ³) from OSHA (PEL) [United States] STEL: 3 (ppm)	Not available.
3) Anionic Surfactant	27176-87-0	0-5	Not available.	Not available.
4) Nonionic Surfactant	9016-45-9	0-5	Not available.	Not available.

Section 3. Hazards Identification

Potential Acute Health Effects	Corrosive to skin and eyes on contact. Irritating to mouth, throat and stomach. Harmful if swallowed.
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	Call a poison control center or doctor immediately for treatment advice. Hold eye open and rinse slowly and thoroughly with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
Skin Contact	Remove contaminated clothing. 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
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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	Full suit. Face shield. Gloves (impervious).

Section 7. Handling and Storage	
Precautions	Avoid contact with skin and eyes. After handling, always wash hands thoroughly with soap and water.
Incompatibility	alkalis oxidizing agents
Storage	Corrosive materials should be stored in a separate safety storage cabinet or room. Keep out of 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	<p><i>Eyes</i> Splash goggles.</p> <p><i>Body</i> Long Pants and Long Sleeves to avoid skin contact.</p> <p><i>Respiratory</i> In case of insufficient ventilation, wear suitable respiratory equipment. Use appropriate respiratory protection if there is the potential to exceed the exposure limit(s).</p> <p><i>Hands</i> Gloves (impervious).</p>
Protective Clothing (Pictograms)	
Exposure Limits	<p>Phosphoric Acid TWA: 1 (mg/m³) TWA: 1 (mg/m³) from OSHA (PEL) STEL: 3 (mg/m³)</p> <p>Consult local authorities for acceptable exposure limits.</p>

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Odor	Characteristic.
Molecular Weight	Not applicable.	Taste	Not available.
pH	<1 [Acidic.]	Color	Off-white. (Light.)
Boiling/Condensation Point	214°F initial		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	1.07 (Water = 1)		
Vapor Pressure	20mm Hg @ 68°F		
Vapor Density	>1 (Air = 1)		
Volatility	75		
VOC	Not available.		
Evaporation Rate	<1		
Dispersion Properties	See solubility in water.		
Solubility	Partially soluble in cold water, hot water, methanol, diethyl ether, n-octanol, acetone.		
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	Non-flammable.		
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.		

Section 10. Stability and Reactivity Data

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

Section 11. Toxicological Information

Routes of Entry	Skin contact. Ingestion. Eye Contact
Toxicity to Animals	Acute oral toxicity (LD50): 4610 mg/kg [Rat]. (Nonionic Surfactant).
Acute Effects on Humans	<p><i>Eyes</i> Very hazardous in case of eye contact (corrosive).</p> <p><i>Skin</i> Very hazardous in case of skin contact (corrosive). Skin contact may produce burns.</p> <p><i>Inhalation</i> Hazardous in case of inhalation. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.</p> <p><i>Ingestion</i> May cause burns to mouth, throat and stomach. May cause headache, dizziness, nausea, vomiting and diarrhea.</p>
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	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	sulfur oxides (SO2, SO3...)
Toxicity of the Products of Biodegradation	The products of biodegradation are as toxic as the original product.
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

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PIN UN, Proper Shipping Name, PG

1760 Corrosive liquid n.o.s.

Maritime Transportation

Not available.

Special Provisions for Transport

Not available.

Section 15. Other Regulatory Information and Pictograms

WHMIS (Classification) WHMIS CLASS E: Corrosive liquid.



Regulatory Lists No products were found.

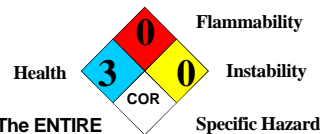
Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications	HCS (U.S.A.)	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 reproductive harm (female) which would require a warning under the statute: Ethylene Oxide < 1ppm 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: Ethylene Oxide < 1ppm Massachusetts RTK: Ethylene Oxide SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Phosphoric Acid
	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	3
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.

Section 16. Other Information

Validated by CRushton on 3/22/2004.

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 3/22/2004.

Tile Clean

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