





# 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

<b>Product Name/ Trade name</b>	<b>Tile Clean</b>	<b>Code</b>	<b>119</b>
<b>Synonym</b>	Deep Cleansing Hard Tile Cleaner	<b>CAS #</b>	Not applicable.
<b>Chemical Family</b>	Not available.	<b>Validation Date</b>	3/2/2007
<b>Chemical Formula</b>	Not applicable.	<b>Print Date</b>	3/23/2007
<b>Manufacturer/ Supplier</b>	Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (419) 241-2156	<b>In Case of Emergency</b>	Chemtrec (800) 424-9300
<b>TSCA</b>	TSCA Inventory: All components listed or are exempt from listing.		
<b>DSL/ NDSL</b>	All components listed unless noted elsewhere on this MSDS		
		<b>Protective Clothing</b> 	

## Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC <sub>50</sub> /LD <sub>50</sub>
Citric Acid	77-92-9	5-10	Not available.	Not available.
Phosphoric Acid	7664-38-2	0-5	TWA: 1 (mg/m <sup>3</sup> ) TWA: 1 (mg/m <sup>3</sup> ) from OSHA (PEL) [United States] STEL: 3 (ppm)	Not available.
Anionic Surfactant	27176-87-0	0-5	Not available.	Not available.
Nonionic Surfactant	9016-45-9	0-5	Not available.	Not available.

## Section 3. Hazards Identification

<b>Potential Acute Health Effects</b>	Corrosive to skin and eyes on contact. Irritating to mouth, throat and stomach. Harmful if swallowed.
<b>Potential Chronic Health Effects</b>	Over-exposure by inhalation may cause respiratory irritation. Prolonged exposure may result in skin burns and ulcerations. .
<b>Carcinogenic Effects</b>	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

## Section 4. First Aid Measures

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	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.
<b>Inhalation</b>	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.

<b>Ingestion</b>	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

<b>Products of Combustion</b>	Not available.
<b>Fire Fighting Media and Instructions</b>	N/A
<b>Special Remarks on Fire Hazards</b>	N/A
<b>Special Remarks on Explosion Hazards</b>	N/A


### Section 6. Accidental Release Measures

<b>Small Spill and Leak</b>	Absorb with an inert material and place in an appropriate waste disposal container.
<b>Large Spill and Leak</b>	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
<b>Personal Protection in Case of a Large Spill</b>	Full suit. Face shield. Gloves (impervious).

### Section 7. Handling and Storage

<b>Precautions</b>	Avoid contact with skin and eyes. After handling, always wash hands thoroughly with soap and water.
<b>Incompatibility</b>	alkalis oxidizing agents
<b>Storage</b>	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

<b>Engineering Controls</b>	Good general ventilation should be sufficient to control airborne levels.
<b>Personal Protection</b>	
<i>Eyes</i>	Splash goggles.
<i>Body</i>	Long Pants and Long Sleeves to avoid skin contact.
<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).
<i>Hands</i>	Gloves (impervious).
<b>Protective Clothing (Pictograms)</b>	
<b>Exposure Limits</b>	<p><b>Phosphoric Acid</b>  TWA: 1 (mg/m<sup>3</sup>)  TWA: 1 (mg/m<sup>3</sup>) from OSHA (PEL)  STEL: 3 (mg/m<sup>3</sup>)</p> <p>Consult local authorities for acceptable exposure limits.</p>

### Section 9. Physical and Chemical Properties

<b>Physical State and Appearance</b>	Liquid.	<b>Odor</b>	Characteristic.
<b>Molecular Weight</b>	Not applicable.	<b>Taste</b>	Not available.
<b>pH</b>	<1 [Acidic.]	<b>Color</b>	Off-white. (Light.)
<b>Boiling/Condensation Point</b>	214°F initial		
<b>Melting/Freezing Point</b>	Not available.		
<b>Critical Temperature</b>	Not available.		
<b>Instability Temperature</b>	Not available.		
<b>Specific Gravity</b>	1.07 (Water = 1)		
<b>Vapor Pressure</b>	20mm Hg @ 68°F		
<b>Vapor Density</b>	>1 (Air = 1)		
<b>Volatility</b>	75		
<b>VOC</b>	Not available.		
<b>Evaporation Rate</b>	<1		
<b>Dispersion Properties</b>	See solubility in water.		
<b>Solubility</b>	Partially soluble in cold water, hot water, methanol, diethyl ether, n-octanol, acetone.		
<b>The Product is:</b>	May be combustible at high temperature.		
<b>Auto-ignition Temperature</b>	Not available.		
<b>Flash Points</b>	CLOSED CUP: >98.889°C (210°F).		
<b>Flammable Limits</b>	Not available.		
<b>Fire Hazards in Presence of Various Substances</b>	Non-flammable.		
<b>Explosion Hazards in Presence of Various Substances</b>	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

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

## Section 11. Toxicological Information

<b>Routes of Entry</b>	Skin contact. Ingestion. Eye Contact
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 4610 mg/kg [Rat]. (Nonionic Surfactant).
<b>Acute Effects on Humans</b>	<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>
<b>Chronic Effects on Humans</b>	Over-exposure by inhalation may cause respiratory irritation. Prolonged exposure may result in skin burns and ulcerations. .
<b>Special Remarks on Toxicity to Animals</b>	No additional remark.
<b>Special Remarks on Chronic Effects on Humans</b>	No additional remark.

## Section 12. Ecological Information

<b>Ecotoxicity</b>	Not Available
<b>BOD5 and COD</b>	Not Available
<b>Products of Biodegradation</b>	sulfur oxides (SO2, SO3...)
<b>Toxicity of the Products of Biodegradation</b>	The products of biodegradation are as toxic as the original product.
<b>Special Remarks on the Products of Biodegradation</b>	No additional remark.

## Section 13. Disposal Considerations

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

## Section 14. Transport Information

**DOT (U.S.A)  
(Pictograms)**



**TDG Classification**


8



**PIN UN, Proper Shipping Name, PG** 1760 Corrosive liquid n.o.s.

**Maritime Transportation** Not available.

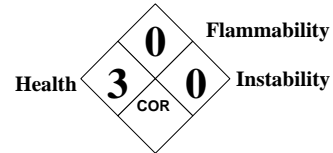
**Section 15. Other Regulatory Information and Pictograms**

<b>WHMIS (Classification)</b>	WHMIS CLASS E: Corrosive liquid.		
<b>Regulatory Lists</b>	No products were found.		
<b>Other Regulations</b>	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).		
<b>Other Classifications</b>	<b>HCS (U.S.A.)</b>	HCS CLASS: Corrosive liquid.	
	<b>USA Regulatory Lists</b>	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	
	<b>DSD (EEC)</b>	This product is not classified according to the EU regulations.	
	<b>International Regulations Lists</b>	No products were found.	

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

Health	<b>3</b>
Flammability	<b>0</b>
Physical Hazard	<b>0</b>

**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 3/2/2007.

Verified by CRushton.

Printed 3/23/2007.

**Information Contact Betco Corporation**  
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 Toledo, Ohio 43607

Notice to Reader:

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***Continued on Next Page***