





# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

 WHMIS (Pictograms)	WHMIS Class E: Corrosive liquid. PRODUCT IS CONTROLLED UNDER PCP. WHMIS CLASS D-1: Material causing immediate and serious toxic effects.  WHMIS (Classification)	HCS CLASS: Corrosive liquid.  HCS
<b>Section 1. Chemical Product and Company Identification</b>		
Product Name/ Trade name <b>Stix</b>	Code <b>76</b>	
Synonym Toilet Bowl/Porcelain/Shower Tile Cleaner	CAS # Not applicable.	
Chemical Family Not available.	Validation Date <b>3/20/2004</b>	
Chemical Formula Not applicable.	Print Date <b>3/27/2004</b>	
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.	Protective Clothing 	
DSL/ NDSL All components listed unless noted elsewhere on this MSDS		

<b>Section 2. Composition and Information on Ingredients</b>				
Name	CAS #	% by Weight	Exposure Limits	LC <sub>50</sub> /LD <sub>50</sub>
1) Phosphoric Acid	7664-38-2	20	TWA: 1 (mg/m <sup>3</sup> ) TWA: 1 (mg/m <sup>3</sup> ) from OSHA (PEL) [United States] STEL: 3 (ppm)	Not available.
2) Quaternary Ammonium Chloride	68424-85-1	0.05	Not available.	Not available.

<b>Section 3. Hazards Identification</b>	
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	Prolonged exposure may result in skin burns and ulcerations. Severe over-exposure can produce lung damage, choking, unconsciousness or death.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

<b>Section 4. First Aid Measures</b>	
Eye Contact	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. Call a poison control center or doctor immediately for treatment advice.
Skin Contact	Remove contaminated clothing and shoes. 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.

<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 NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.
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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

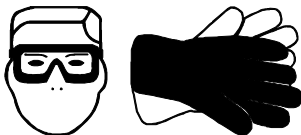
### Section 6. Accidental Release Measures

<b>Small Spill and Leak</b>	Chemical anti-splash goggles.
<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>	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

<b>Precautions</b>	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 or spray. Never add water to this product. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.
<b>Incompatibility</b>	Strong alkalis and oxidizers, reactive metals.
<b>Storage</b>	Corrosive materials should be stored in a separate safety storage cabinet or room. Keep out of the 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>	
<i>Respiratory</i>	Not applicable.
<i>Hands</i>	Gloves (impervious).
<b>Protective Clothing (Pictograms)</b>	
<b>Exposure Limits</b>	<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> )  Consult local authorities for acceptable exposure limits.

### Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Odor	Pleasant. (Slight.)
Molecular Weight	Not applicable.	Taste	Not available.
pH	1.5 to 2 [Acidic.]	Color	Clear Pink (Light.)
Boiling/Condensation Point	88°C (190.4°F)		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	1.12 (Water = 1)		
Vapor Pressure	<20 mm of Hg (@ 20°C)		
Vapor Density	>1 (Air = 1)		
Volatility	Not available.		
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	Not available.		
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	Strong alkalis and oxidizers, reactive metals.
Hazardous Decomposition Products	Will not occur.

### Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 4610 mg/kg [Rat]. (Nonionic Surfactant).
Acute Effects on Humans	
<i>Eyes</i>	Severe eye irritant. Liquid or mist may burn or injure the eyes.
<i>Skin</i>	Severe skin irritant. Prolonged or repeated contact can cause chemical burns or dermatitis.
<i>Inhalation</i>	May be irritating to mucous membranes of the nose, throat, and lungs.
<i>Ingestion</i>	May be irritating to the mouth and throat. Large doses can cause nausea and vomiting.
Chronic Effects on Humans	Prolonged exposure may result in skin burns and ulcerations. Severe over-exposure can produce lung damage, choking, unconsciousness or death.
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	Class 8: Corrosive material	
PIN UN, Proper Shipping Name, PG	1760 Corrosive liquid n.o.s. PG II	
Maritime Transportation	Not available.	
Special Provisions for Transport	Not available.	

## Section 15. Other Regulatory Information and Pictograms

### WHMIS (Classification)

WHMIS Class E: Corrosive liquid. PRODUCT IS CONTROLLED UNDER PCP.  
WHMIS CLASS D-1: Material causing immediate and serious toxic effects.



### 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 <1 ppm  
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 <1 ppm  
Massachusetts RTK: Ethylene Oxide  
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Phosphoric Acid  
SARA 313 toxic chemical notification and release reporting: Phosphoric Acid

#### DSD (EEC)

R35- Causes severe burns.

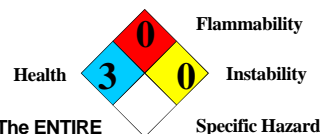
#### International Regulations Lists

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 3/20/2004.

Verified by CRushton.

Printed 3/27/2004.

**Information Contact** Betco Corporation  
1001 Brown Avenue  
Toledo, Ohio 43607  
(419) 241-2156

### 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 3/20/2004.

**Stix**

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