PRODUCT DATA



Cleans and deodorizes in one easy step!

FEATURES

- Thick HCI formulation dissolves rust stains and hard water deposits quickly
- Pleasant fragrance
- Easy to use



RECOMMENDED SURFACES

Toilet bowls, tanks, urinals, porcelain enamel

PRODUCT DATA

| Description: | Toilet bowl cleaner |
|----------------------|---|
| Appearance: | Thick blue liquid |
| Fragrance: | Mint |
| pH: | 1.5 ± 0.5 ASTM E70-97 |
| Solubility in Water: | Complete |
| Density: | 8.7 lb per gal @ 68¡F 1.04 kg per liter @ 20¡C |
| Flash Point: | None |
| Flammability: | None |
| Freeze/Thaw: | Passes 3 cycles ASTM D3209-93 (1998) |
| Shelf Life: | 2 years, ASTM D1791-93 (1998) |

PRECAUTIONS

Keep out the reach of children. Severe skin and eye irritant. Chemically resistant gloves and safety goggles are recommended. Keep container sealed when not in use.

ORDERING INFORMATION

Product #320Q12:

32 US oz (0.95 liters) Twelve 1-qt containers per case

DIRECTIONS FOR USE:

Toilets:

- 1. If severely stained, remove as much water as possible.
- 2. Pour generously into bowl and onto bowl swab.
- 3. Thoroughly clean all interior surfaces of the bowl including under the rim.
- 4. Rinse and flush.

Urinals:

- 1. Wet swab and apply cleaner liberally to the inside of the urinal, concentrating under flush rim.
- 2. Rinse thoroughly and flush.

Toilet tanks:

1. Clean regularly with cleaner on swab and flush thoroughly.

Porcelain enamel:

- 1. Dilute with 3 parts water.
- 2. Apply with swab.
- 3. Flush immediately with clean, cold water.

NOTE: DO NOT USE ON PORCELAIN ENAMEL THAT IS NOT ACID RESISTANT. Use only if surface is not cracked or chipped.



STARSHINE TOILET BOWL CLEANER

LAST REVISION DATE: 03/22/06 MANUFACTURER: Pioneer Eclipse® Corp. Sparta, NC 28675 Phone: 1-336-372-8080 FOR CHEMICAL EMERGENCY: Spill, Leak, Fire, Exposure or Accident CALL CHEMTREC - Day or Night 1-800-424-9300 Toll Free in the Continental US 483-7616 in DISTRICT OF COLUMBIA. For calls originating outside the US: Call Collect 1-202-483-7616 Washington, DC.

SECTION I: GENERAL INFORMATION

PRODUCT NAME: StarShine® Toilet Bowl Cleaner PRODUCT #: 320 PRODUCT TYPE: Cleaner & Deodorant PRECAUTIONS: Severe skin and eye irritant. Keep container sealed when not in use. Keep out of

reach of children. FLAMMABILITY: 0 REACTIVITY: 0 HEALTH: 3 NFPA HAZARD RATINGS



4-EXTREME 3-HIGH 2-MODERATE 1-SLIGHT 0-INSIGNIFICANT

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT: Hydrochloric acid CAS#: 7647-01-0 %: 9.49 OSHA PEL: 5 ppm (ceiling) ACGIH TLV: 2 ppm (STEL) (ceiling) LD_{EO} SPECIES & ROUTE: 0.9 g/kg rat, oral

N/E = Not Established, N/L = Not Listed N/A = Not Applicable

SECTION III: PHYSICAL/CHEMICAL DATA

APPEARANCE: Thick blue liquid pH: 1.5 ± 0.5 BOILING POINT: 100° C / 212° F EVAPORATION RATE: Less than water FREEZING POINT: 0° C / 32° F VAPOR DENSITY: Greater than air VOLATILE BY WEIGHT: 93-95%VAPOR PRESSURE: Less than water DENSITY: 8.7 lb per gal @ 68° F 1.04 kg per liter @ 20° C SOLUBILITY IN WATER: Complete

SECTION IV: FIRE AND EXPLOSION DATA

FLASH POINT: None EXPLOSIVE LIMITS: LOWER: N/A UPPER: N/A EXTINGUISHING MEDIA: N/A SPECIAL FIRE FIGHTING PROCEDURES: None HAZARDOUS COMBUSTIBLE PRODUCTS: None UNUSUAL FIRE AND EXPLOSION HAZARDS: Materials can splatter above 100°C / 212°F.

SECTION V: REACTIVITY DATA

STABILITY: Stable HAZARDOUS POLYMERIZATION: Will not occur. INCOMPATIBILITY (MATERIALS TO AVOID): Strong bases and bleach HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride REACTIVITY CONDITIONS: None

SECTION VI: HEALTH HAZARD DATA

EYES: Severe eye irritant. Liquid and mist can cause tearing, possible swelling of the conjunctiva, and corneal injury. Possible irreversible eye damage. Hold eyelids open. Flush with a steady gentle stream of water for 15 minutes. Seek medical attention immediately. SKIN: Severe skin irritant. Corrosive. Causes skin burns. Remove contaminated clothing. Wash affected area with plenty of soap and water. Seek medical attention. INHALATION: Remove to fresh air. **INGESTION:** May be irritating or corrosive to the mouth, throat, and upper gastrointestinal tract. May be fatal if swallowed. Do not induce vomiting. Give large quantities of milk, egg white, gelatin solution, or if these are not available, large quantities of water. Contact a physician or poison control center immediately. CHRONIC EFFECTS AND MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: Main hazard is due to product's irritant properties. Treatment should be directed at the control of symptoms and the clinical condition of the patient. CARCINOGEN: Non-carcinogenic **REPRODUCTIVE EFFECTS: N/E** TERATOGENICITY: N/E MUTAGENICITY: N/E THRESHOLD LIMIT VALUE: See Section II.

SECTION VII: SPILL, LEAK & DISPOSAL PROCEDURES

SMALL SPILLS: Absorb spill with inert material (e.g. sand, earth) and dispose of as waste material in accordance with local, state and federal regulations.

LARGE SPILLS: Keep spectators away. Floors may be slippery; use care to avoid falling. Dike and contain spill with inert material (e.g. sand, earth). Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for disposal. Keep spills and cleaning runoff out of sewers and open bodies of water. WASTE DISPOSAL: Landfill or incinerate the contaminated solids and diking material according to local, state and federal regulations concerning disposal of hazardous materials. Non-salvageable liquid should be drummed and turned over to a licensed hazardous waste disposal facility.

SECTION VIII: SPECIAL PROTECTION

EYE PROTECTION: Chemical splash goggles (ANSI Z87.1-1989 or approved equivalent) **RESPIRATORY PROTECTION:** None required when permissible airborne concentrations are not exceeded. In emergency, use approved positive pressure self-contained breathing device.

VENTILATION: Mechanical local exhaust ventilation at point of contamination release OTHER PROTECTIVE EQUIPMENT: As required by employer code. Rubber boots and chemically resistant gloves are recommended.

SECTION IX: SPECIAL PRECAUTIONS

HANDLING AND STORAGE: Storage temperature (MAX. 60°C / 140°F) (MIN.1°C / 34°F) OTHER PRECAUTIONS: Avoid freezing. If frozen, allow to return to room temperature slowly. Mix thoroughly before using.

SECTION X: ADDITIONAL INFORMATION

Neither this data sheet nor any statement contained herein arants or extends any license. expressed or implied, in connection with patents issued or pending which may be the property of the manufacturer or others. The information in this data sheet has been assembled by the manufacturer based on its own studies and the work of others. The manufacturer makes no warranties, expressed or implied, as to the accuracy, completeness or adequacy of the information contained herein, the manufacturer shall not be liable (regardless of fault) or the vendee, the vendee's employees or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of such information.

This MSDS has been provided to you in accordance with the OSHA HAZARD COMMUNICATION STANDARD (29CFR1910.1200).

IMPORTANT SAFETY INFORMATION DO NOT DISCARD **PLEASE ROUTE TO COMPANY SAFETY OFFICER**

Dioneer Eclipse

LTPD320Q-03/06