



# MATERIAL SAFETY DATA SHEET

Conforms to 2001/58/EC Issued: 21/03/2006

## PRODUCT NAME: STARSHINE TILE & GROUT CLEANER

### I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<b>PRODUCT NAME</b>	: StarShine Tile & Grout Cleaner	Product Number: 327
<b>PRODUCT USE</b>	: Chlorinated cleaner concentrate	
<b>MANUFACTURER</b>	: Pioneer Eclipse Corp.	
<b>P.O.BOX</b>	: 909	
<b>ADDRESS</b>	: 1 Eclipse Road, Sparta NC 28675, USA	
<b>PHONE</b>	: +1 336 372 8080	

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation: Preparation

#### INFORMATION ON HAZARDOUS INGREDIENTS

Chemical Name	Einecs No.	Weight %	CAS No.	Symbol	R phrases *
Sodium hydroxide	215-185-5	1-3	1310-73-2	C (Corrosive)	R35
Sodium hypochlorite	231-668-3	1-3	7681-52-9	C (Corrosive) N (Dangerous for the environment)	R31, R34, R50
Amines, C12-18-alkyldimethyl, N-oxides	273-281-2	1-3	68955-55-5	Xi (irritant) N (Dangerous for the environment)	R38, R41, R50

\*see section 16 for the full text of relevant R phrases

### 3. HAZARDS IDENTIFICATION

**Physical/chemical hazards:** Corrosive  
**Human health hazards:** Corrosive.  
**Environmental hazards:** On the basis of available information, this material/preparation is not expected to produce any significant adverse environmental effects when used as directed.

### 4. FIRST AID MEASURES

#### EFFECTS AND SYMPTOMS

**Inhalation:** May be harmful if inhaled. May cause irritation and corrosive effects to nose, throat and respiratory tract.  
**Ingestion:** May cause burns to mouth, throat and stomach. May be harmful if swallowed.  
**Skin contact:** May cause permanent damage. Harmful in contact with skin.  
**Eye contact:** May cause permanent damage.

#### FIRST AID MEASURES

**Inhalation:** If breathing is difficult: Remove to fresh air. Get medical attention immediately.  
**Ingestion:** Do not induce vomiting! Immediately drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.  
**Skin contact:** Immediately wash off with plenty of water for at least 15 minutes. Get medical attention immediately.

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**Eye contact:** Immediately wash out with water for at least 15 minutes. Get medical attention immediately.

### 5. FIRE FIGHTING MEASURES

**Extinguishing media:** Dry chemical, water spray, foam, carbon dioxide  
**Hazardous combustion products:** None  
**Unusual fire and explosion hazards:** Materials can splatter above 100°C/212°F.  
**Special fire fighting procedures:** Corrosive material (See sections 8 and 10).

### 6. ACCIDENTAL RELEASE MEASURES

Put on appropriate personal protective equipment (see Section 8).

**Small spills:** Absorb spill on inert material (e.g. sand, earth) and dispose off as waste material in accordance with national and regional provisions.  
**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.

### 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use only in well-ventilated areas. Avoid breathing vapours or spray mists. Remove and wash contaminated clothing and footwear before re-use.  
**Storage:** Storage temperature (Max. 60°C/140°F) (Min. 1°C/34°F). Keep from freezing, product may coagulate. Keep container sealed when not in use. Keep out of reach of children.

### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

**Exposure limit values:**

Component Name:	Source / Date	Value / Units	Type	Carcinogenic Listing*
Sodium hydroxide	US(OSHA) 2005	2 mg/m <sup>3</sup>	8 HRS / TWA	N/L
Sodium hydroxide	US(ACGIH) 2005	2 mg/m <sup>3</sup>	15 min / STEL Ceiling	N/L

\*1 = OSHA, 2 = IARC, 3 = NTP, 4 = Others, N/L = Not Listed

**Exposure controls:** No special ventilation requirements. Ensure adequate general ventilation.

#### OCCUPATIONAL EXPOSURE CONTROLS

**Respiratory protection:** No specific personal protection is required.  
**Hand protection:** Rubber gloves recommended  
**Eye protection:** Safety glasses and face shield recommended.  
**Skin protection:** If major exposure is possible, wear suitable protective clothing such as rubber boots, apron, etc.

**Environmental exposure controls:** No specific environmental exposure controls required.

**PRODUCT NAME: STARSHINE TILE & GROUT CLEANER****9. PHYSICAL AND CHEMICAL PROPERTIES****GENERAL INFORMATION****Appearance:** Colorless liquid**Odour:** chlorine**IMPORTANT HEALTH, SAFETY AND ENVIRONMENTAL INFORMATION****pH:** 12.65 to 13.15**Flash point:** none**Oxidizing properties:** Not an oxidizer**Relative density:** 1.10 kg/l @ 20°C**Partition coefficient (n-octanol/water):** Not determined**Vapour density:** Greater than air**Other information:** N/A**Boiling point/boiling range:** 100°C**Explosive properties:** None**Vapour pressure:** Greater than water**Solubility:** 100% soluble (dispersible) in water**Viscosity:** less than 10 @ 20°C**Evaporation rate:** Less than water**10. STABILITY AND REACTIVITY****Conditions to avoid:**

High temperature

**Materials to avoid:**

May react or be incompatible with acids, water and certain metals (aluminum).

**Hazardous decomposition products:** CO, CO<sub>2</sub>, Cl<sub>2</sub>**11. TOXICOLOGICAL INFORMATION****COMPONENT SUMMARY**Sodium Hydroxide**LD<sub>50</sub>:** (Oral) rabbit 200 mg/kg**Causes severe burns.****POTENTIAL HEALTH EFFECTS****Eye:** Causes severe eye burns. May cause irreversible eye injury. Contact may cause ulceration of the conjunctiva and cornea. Eye damage may be delayed. Causes redness and pain.**Skin:** May cause deep, penetrating ulcers of the skin. Causes severe burns with delayed tissue destruction. Causes redness and pain.**Ingestion:** Harmful if swallowed. May cause circulatory system failure. May cause perforation of the digestive tract. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death.**Inhalation:** Harmful if inhaled. Irritation may lead to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.**Chronic:** Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated eye contact may cause conjunctivitis.**Carcinogenicity:** Not expected to occur.Sodium Hypochlorite**LD<sub>50</sub>:** (Oral) mouse 5800 mg/kg**Contact with acids liberates toxic gas. Irritating to eyes and skin. Light sensitive.****POTENTIAL HEALTH EFFECTS****Eye:** Causes eye irritation.

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**Skin:** Causes skin irritation.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

**Inhalation:** May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema.

**Chronic:** Not available.

**Carcinogenicity:** Not expected to occur.

Amines, C12-18-alkyldimethyl, N-oxides

**Potential Health Effects**

**Eye:** Severely irritating to eyes. May cause permanent damage.

**Skin:** Irritating to skin.

**Ingestion:** May cause gastrointestinal irritation including nausea and diarrhea.

**Inhalation:** May be irritating to respiratory system.

**Chronic:** None known.

**CARCINOGENICITY:** Not expected to occur.

**PREPARATION SUMMARY****LOCAL EFFECTS**

**Skin contact:** See section 4

**Eye contact:** See section 4

**Sensitization:** None known

**Chronic effects:** None known

**SPECIFIC EFFECTS**

**Carcinogenicity:** None known

**Reproductive effects:** None known

**Teratogenicity:** None known

**Mutagenicity:** None known

**12. ECOLOGICAL INFORMATION****COMPONENT SUMMARY**

Amines, C12-18-alkyldimethyl, N-oxides

Aquatic Toxicity: fish, CL50: <1 mg/l

Also poisonous for fish and plankton in water bodies.

Sodium Hypochlorite

LC50 (96 hr) fathead minnow: 5.9 mg/l

Sodium Hydroxide

25 ppm /24 hours/ LC50/ Brook trout

**PREPARATION SUMMARY**

**Ecotoxicity:** This preparation is highly soluble in water. Limited toxicity tests and models indicate this preparation should exhibit low toxicity to aquatic organisms.

**Environmental Fate:** This preparation will biodegrade relatively rapidly in both soil and water, and will not persist in the environment. Due care should be taken to avoid accidental releases to aquatic or terrestrial systems.

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**Bioaccumulation:** Because of this preparation's high solubility and rapid biodegradability, it is unlikely that bioaccumulation will occur in aquatic or terrestrial systems. Models estimate that this material will preferentially partition to water versus air or soil. Based on available information, this preparation is not expected to produce any significant adverse environmental effects, when used as directed.

### 13. DISPOSAL

Disposal of this material should be in accordance with local, regional and national regulations.

### 14. TRANSPORT INFORMATION

#### INTERNATIONAL TRANSPORTATION REGULATIONS:

**UN number:** UN1760

**Packing group:** III

#### LAND-ROAD/RAILWAY

**Proper shipping name:**

Corrosive liquid, n.o.s. mixture contains Sodium Hydroxide  
8

**ADR/RID class:**

8

**ADR/RID item number:**

80°C

#### SEA

**Proper shipping name:**

Corrosive liquid, n.o.s. mixture contains Sodium Hydroxide  
8

**IMDG class:**

8

**Medical First Aid Guide (MFAG):**

730

**Emergency Schedules (EmS):**

Fire F-A, Spillage S-B

**Marine Pollutant:**

none

### 15. REGULATORY INFORMATION

**NATIONAL REGULATIONS:** No additional national regulations are known to the supplier.

#### EU REGULATIONS

**Hazard Symbol:**



**EU Classification:**

Corrosive (67/548/EEC-88/379/EEC).

**Risk phrases:**

See section 16.

**Safety phrases:**

S1/2- Keep locked up and out of the reach of children.

S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28- After contact with skin, wash immediately with plenty of water.

S28a-After contact with skin, wash immediately with plenty of water.

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S37/39- Wear suitable gloves and eye/face protection.  
S45-In case of accident or if you feel unwell, seek medical advice immediately  
(show the label where possible).  
S61-Avoid release to the environment.

**EINECS Status:** All ingredients are included in the EINECS inventories.

**CANADA CPR Status:** This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

**Other Data**

The surfactant contained in this preparation complies with the biodegradability criteria laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member states and will be made available to them, at their direct request or at the request of the detergent manufacturer.

**16. OTHER INFORMATION****Relevant R phrases:**

R31-Contact with acids liberates toxic gas.  
R34- Causes burns.  
R35-Causes severe burns.  
R38-irritating to skin.  
R41-Risk of serious damage to eyes.  
R50-Very toxic to aquatic organisms.

**Detergent/Cleaner labeling (89/542/EEC):**

(>0.2%-<5%) non-ionic surfactants, (<5%) Polycarboxylate and (<5%) chlorine-based bleaching agent.

**Issued by:**

Genie G Bost, Regulatory Affairs Manager

**Revision Information:**

21/03/2006, revision conforming to 648/2004/EC