

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

**Product Name:** StarShine Tile & Grout Cleaner **Product Number:** 327RTU  
**Product Use:** chlorinated cleaner concentrate

**Manufacturer Address:**  
 Amano Pioneer Eclipse Corp.  
 P.O. Box 909  
 1 Eclipse Road  
 Sparta, NC 28675 USA

**Contact Information:**  
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**For Chemical Emergency - Spill, Leak, Fire, Exposure or Accident.** Call CHEMTREC Day or Night.  
 Within USA and Canada 1 800 424 9300 Outside USA and Canada: +1 703 527 3887 (collect calls accepted)

#### 2. HAZARDS IDENTIFICATION

This preparation has been classified and labeled according to 1999/45/EC.

**EU Classification:** Classified as Corrosive  
**Danger symbol:**



**Risk phrases:**  
 R35- Causes severe burns.  
 R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**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.  
 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.)  
 S60- This material and its container must be disposed of as hazardous waste.  
 S61- Avoid release to the environment. Refer to special instructions/Safety Data sheets.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Dangerous Ingredients	EC No.	Weight %	CAS No.	Symbol	R-phrases *
sodium hydroxide	215-185-5	< 6	1310-73-2	C: Corrosive	R35
sodium hypochlorite	231-668-3	< 2	7681-52-9	C: Corrosive N: Dangerous for the environment	R34, R50

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

#### 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:** Harmful if swallowed. May cause burns to mouth, throat and stomach.  
**Skin contact:** Harmful in contact with skin. May cause permanent damage.  
**Eye contact:** Harmful in contact with eyes. May cause permanent damage.

##### FIRST AID MEASURES

**Inhalation:** If breathing is difficult: Remove to fresh air. Seek medical attention immediately.  
**Ingestion:** Call a physician or poison control center immediately. DO NOT induce vomiting unless directing to do so by medical personnel. Never give anything by mouth to an unconscious person.  
**Skin contact:** Immediately wash off with plenty of water for at least 15 minutes. (Remove any contaminated clothing and shoes.) Seek medical attention immediately.  
**Eye contact:** Immediately wash out with water for at least 15 minutes. (If easy to do, remove contact lenses, if worn.) Seek 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 of as waste material in accordance with national and regional provisions.
- Large spills:** Keep spectators away. Floors may be slippery; use care to avoid falling. Neutralize spill area. 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:

Ingredient	CAS Number	ACGIH		OSHA	
		TWA	STEL	TWA	STEL
sodium hydroxide	1310-73-2	N/E	2 mg/m <sup>3</sup> (Ceiling)	2 mg/m <sup>3</sup>	N/E

- Exposure controls:** Ensure adequate general ventilation.
- Environmental exposure controls:** No specific environmental exposure controls required.

#### PERSONAL PROTECTION

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

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

- |   |   |
|---|---|
| <b>Appearance :</b> colorless liquid                  | <b>Odor:</b> chlorine                               |
| <b>Odor threshold:</b> N/E                            | <b>pH:</b> 12                                       |
| <b>Melting point/Freezing Point:</b> N/E              | <b>Initial boiling point/boiling range:</b> 100°C   |
| <b>Flash point:</b> > 93°C                            | <b>Evaporation Rate:</b> N/E                        |
| <b>Upper/lower flammability/explosive limits:</b> N/E | <b>Vapor pressure:</b> greater than water           |
| <b>Vapor density:</b> N/E                             | <b>Relative density:</b> 1.09 kg/L @ 20°C           |
| <b>Solubility:</b> 100% soluble in water              | <b>Partition coefficient (n-octanol/water):</b> N/E |
| <b>Auto-ignition temperature:</b> N/E                 | <b>Decomposition temperature:</b> N/E               |
| <b>Viscosity:</b> < 10 cps @ 20°C                     | <b>Explosive Properties:</b> N/E                    |
| <b>Oxidizing properties:</b> Not an oxidizer          | <b>Other information:</b> N/A                       |

#### 10. STABILITY AND REACTIVITY

- Chemical stability:** Stable under normal conditions
- Hazardous Reactions:** Adding water directly to the product may generate heat and cause product to splash. To avoid adverse reaction: always add product to water, do not add water to product.
- Conditions to avoid:** Improper order of dilution
- Incompatible materials:** Strong acids and oxidizing agents
- Hazardous decomposition products:** None known

#### 11. TOXICOLOGICAL INFORMATION

**PREPARATION SUMMARY** - Toxicity testing has not been completed on the mixture.

#### LOCAL EFFECTS

- Skin contact:** Corrosive. Can cause skin burns.
- Eye Contact:** Corrosive. Can cause eye burns.
- Sensitization:** None expected
- Chronic effects:** None expected

#### SPECIFIC EFFECTS

- Carcinogenicity:** None known
- Reproductive effects:** None known
- Teratogenicity:** None known
- Mutagenicity:** None known

#### COMPONENT SUMMARY \*

##### sodium hydroxide CAS# 1310-73-2

LD<sub>50</sub>: (oral, rat) (50% solution) 220 mg/kg

##### Potential Health Effects

**Eye:** May cause irritation (possibly severe), chemical burns and eye damage.

**Skin:** May cause irritation (possibly severe) and chemical burns.

**Ingestion:** May cause irritation (possibly severe), chemical burns, nausea and vomiting.

**Inhalation:** May cause irritation (possibly severe), chemical burns and pulmonary edema.

**Chronic:** Chronic effects due to long-term irritation and over-exposure. May produce inflammation of the eyes, skin and mucous membranes.

**Carcinogenicity:** Not listed as a carcinogen.

##### sodium hypochlorite CAS# 7681-52-9

LD<sub>50</sub>: (oral, rat) >90 ml/kg

##### Potential Health Effects

**Eye:** May cause irreversible eye injury.

**Skin:** Causes skin burns.

**Ingestion:** Causes severe digestive tract burns.

**Inhalation:** Causes severe irritation of upper respiratory tract.

**Chronic:** Repeated skin contact may result in dermatitis.

**Carcinogenicity:** Not listed as a carcinogen.

\*Component data recorded from available sources pertaining to individual component CAS number.

#### 12. ECOLOGICAL INFORMATION

**PREPARATION SUMMARY** - Ecological testing has not been completed on the mixture.

#### COMPONENT SUMMARY \*

##### sodium hydroxide CAS# 1310-73-2

LC<sub>50</sub>: (24 hr) brook trout 25 ppm

EC<sub>50</sub>: Daphnia magna 100 ppm

**Environmental Fate:** This material is inorganic and not subject to biodegradation. Moderately toxic to aquatic organisms. Not expected to bioconcentrate.

##### sodium hypochlorite CAS# 7681-52-9

LC<sub>50</sub>: (48 hr) rainbow trout 0.07 mg/L

LC<sub>50</sub>: (96 hr) fathead minnow 5.9 mg/L

**Environmental Fate:** Possibly hazardous short-term degradation products are not likely. However, long-term degradation products may arise.

\*Component data recorded from available sources pertaining to individual component CAS number.

#### 13. DISPOSAL CONSIDERATIONS

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

#### 14. TRANSPORT INFORMATION

**\*\*NOTE: Package volume is <5L. This product is shipped under Limited Quantity Exception.\*\***

##### INTERNATIONAL TRANSPORTATION REGULATIONS:

UN number: UN1760

Packing group: III

##### LAND-ROAD/RAILWAY

Proper shipping name:

Corrosive liquid, n.o.s. (sodium hydroxide)

ADR/RID class:

8

ADR/RID item number:

80

##### SEA

Proper shipping name:

Corrosive liquid, n.o.s. (sodium hydroxide)

IMDG class:

8

Medical First Aid Guide (MFAG):

730

Emergency Schedules (EmS):

Fire F-A, Spillage S-B

Marine Pollutant:

none

#### 15. REGULATORY INFORMATION

**EINECS Status** Ingredients are included in the EINECS/ELINCS/NLP inventories.

#### **NATIONAL REGULATIONS**

648/2004

The surfactants contained in this preparation comply 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.

No additional national regulations are known to the supplier.

#### 16. OTHER INFORMATION

##### **R (Risk) phrases:**

R34 - Causes burns.

R35 - Causes severe burns.

R50/53 - Very toxic to aquatic organisms.

##### **S (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.

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.)

S60 - This material and its container must be disposed of as hazardous waste.

S61 - Avoid release to the environment. Refer to special instructions/Safety Data sheets.

##### **Detergent/Cleaner labeling (648/2004):**

<5% - non-ionic surfactant, polycarboxylate, chlorine-based bleaching agent

##### **Abbreviations:**

N/A = Not Applicable

N/E = Not Established

N/L = Not Listed

##### **Issued by:**

Chemical/R&D Department

Amano Pioneer Eclipse Corporation

##### **Revision Information:**

07/11/2011 – revisions conforming to 1907/2006/EC amendment 453/2010