

PRODUCT NAME: STARSHINE FOAMING DEGREASER

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

PRODUCT NAME	: StarShine Foaming Degreaser	Product Number: 316
PRODUCT USE	: Water based foaming degreaser concentrate	

MANUFACTURER	: Pioneer Eclipse Corp.	
P.O.BOX	: 909	
ADDRESS	: 1 Eclipse Road, Sparta NC28675, USA	
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation: Preparation

INFORMATION ON HAZARDOUS INGREDIENTS

Chemical Name	Einecs No.	Weight %	CAS No.	Symbol	R phrases *
Potassium hydroxide	215-181-3	2-5	1310-58-3	C (Corrosive) Xn (Harmful)	R22, R35
Sodium carbonate	207-838-8	2-5	497-19-8	Xi (irritant)	R36
Sodium metasilicate	229-912-9	2-5	6834-92-0	C (Corrosive) Xi (irritant)	R34, R37
Ethoxylated alcohols phosphate ester		2-5	68130-47-2	C (Corrosive) Xi (irritant)	R34, R36
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.



MATERIAL SAFETY DATA SHEET

Conforms to 2001/58/EC Issued: 06/10/2005

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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.

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 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. 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 vapors 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*
Potassium Hydroxide	US(ACGIH) 2005	2 mg/m3	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 recommended

Skin protection: If major exposure is possible, wear suitable protective clothing such as

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rubber boots, apron, etc.

Environmental exposure controls: No specific environmental exposure controls required.**9. PHYSICAL AND CHEMICAL PROPERTIES****GENERAL INFORMATION****Appearance:** Thin clear liquid**Odour:** none**IMPORTANT HEALTH, SAFETY AND ENVIRONMENTAL INFORMATION****pH:** 13.05 to 13.55**Flash point:** none**Oxidizing properties:** Not an oxidizer**Relative density:** 1.077 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 25 CPS @ 20°C**Evaporation rate:** Less than water**10. STABILITY AND REACTIVITY****Conditions to avoid:** None known**Materials to avoid:** May react or be incompatible with acids.**Hazardous decomposition products:** None known**11. TOXICOLOGICAL INFORMATION****COMPONENT SUMMARY**Potassium HydroxideLD₅₀: (Oral) Rat 365 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.**Acute Toxicity:**Corrosive. Oral LD₅₀ estimated to be between 200 - 2000 mg/kg. Dermal LD₅₀ estimated to be between 400 - 2000 mg/kg. LC₅₀ estimated to be between 2 - 20 mg/L/4hr.

PRODUCT NAME: STARSHINE FOAMING DEGREASERSodium metasilicateLD₅₀: (Oral) rat 1300 mg/kg**Potential Health Effects**

- Eye:** Causes eye irritation. Causes redness and pain.
Skin: Causes skin irritation. Causes redness and pain.
Ingestion: Harmful if swallowed. Causes digestive tract irritation with abdominal pain and vomiting.
Inhalation: Harmful if inhaled. Irritation may lead to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, and breathing difficulty.
Chronic: Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated eye contact may cause conjunctivitis.

CARCINOGENICITY: Not expected to occur.

Acute Toxicity: Corrosive. Oral LD50 estimated to be between 200 - 2000 mg/kg. Dermal LD50 estimated to be between 400 - 2000 mg/kg. LC50 estimated to be between 2 - 20 mg/L/4hr.

Sodium carbonateLD₅₀: (Oral) rat 4090 mg/kg**Potential Health Effects**

- Eye:** Causes eye irritation. Causes redness and pain.
Skin: Causes skin irritation. Causes redness and pain.
Ingestion: Harmful if swallowed. Causes digestive tract irritation with abdominal pain and vomiting.
Inhalation: May irritate the mucous membranes and upper respiratory tract.
Chronic: No data available.

CARCINOGENICITY: Not expected to occur.**PREPARATION SUMMARY****Acute Toxicity:** No data available.Ethoxylated Alcohols phosphate esterLD₅₀: (Oral) rat 3950 mg/kg**Potential Health Effects**

- Eye:** Causes eye irritation. Causes redness and pain.
Skin: Causes skin irritation. Causes redness and pain.
Ingestion: May cause burns to mouth and esophagus.
Inhalation: Not likely but mists may cause shortness of breath, upper respiratory trace irritation.
Chronic: No data 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.

PRODUCT NAME: STARSHINE FOAMING DEGREASER**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**

Sodium metasilicate: not available
Ethoxylated Alcohols Phosphate Ester: not available

Potassium Hydroxide
30 ppm/Mosquito fish/24hr/fresh water/TLm

Sodium carbonate
96 hour LC₅₀ = 265-565 mg/L (daphnia magna) (low toxicity)
96-hour LC₅₀ = 300-320 mg/L (bluegill sunfish) (low toxicity)

Amines, C12-18-alkyldimethyl, N-oxides
Aquatic Toxicity: fish, CL50: <1 mg/l
Also poisonous for fish and plankton in water bodies.

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.

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

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LAND-ROAD/RAILWAY

Proper shipping name: Corrosive liquid, n.o.s. mixture contains Potassium Hydroxide
ADR/RID class: 8
ADR/RID item number: 80°c

SEA

Proper shipping name: Corrosive liquid, n.o.s. mixture contains Potassium 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

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.
 S13-Keep away from food, drink and animal feeding stuffs.
 S22-Do not breathe dust.
 S24/25-Avoid contact with skin and eyes.
 S26-In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S28a-After contact with skin, wash immediately with plenty of water.
 S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
 S45-In case of accident or if you feel unwell, seek medical advice immediately.
 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.

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R22- Harmful if swallowed.
R34/35-Causes severe burns.
R36/37-Irritating to eyes and respiratory system.
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%) anionic surfactant, (>5%-<15%) Non-ionic surfactants and (0.2-<5%) EDTA.

Issued by:

Genie G Bost, Regulatory Affairs Manager

Revision Information:

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