



MATERIAL SAFETY DATA SHEET

Conforms to 2001/58/EC Issued: 15/09/2005

PRODUCT NAME: ENVIROSTAR GREEN ALL PURPOSE NEUTRALIZER

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

PRODUCT NAME	: EnviroStar Green All Purpose Neutralizer	Product Number: 338
PRODUCT USE	: Water based alkalinity neutralizer concentrate	

MANUFACTURER	: Pioneer Eclipse Corp.	
P.O.BOX	: 909	
ADDRESS	: 1 Eclipse Road, Sparta, North Carolina, 28675, USA	
PHONE	: +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
Citric acid mono hydrate	201-069-1	5-<15	5949-29-1	Xi (irritant)	R 36/37/38

*See section 16 for the full text of relevant R phrases

3. HAZARDS IDENTIFICATION

Physical/chemical hazards: No physical or chemical hazards have been reported or are known.
Human health hazards: This product is not dangerous according to the EU regulations 67/548/EEC-1999/45/EC).
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: None known
Ingestion: None known
Skin contact: May be mildly irritating
Eye contact: May be mildly irritating

FIRST AID MEASURES

Inhalation: No specific measures required
Ingestion: No specific measures required
Skin contact: Immediately wash off with plenty of water. If irritation develops, get medical attention.
Eye contact: Immediately wash out with water. If irritation develops, get medical attention.

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: None

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6. ACCIDENTAL RELEASE MEASURES

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 skin and eyes

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: None established

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 rubber boots, apron, etc.

Environmental exposure controls: No specific environmental exposure controls required.

9. PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION

Appearance: Clear liquid

Odour: None added

IMPORTANT HEALTH, SAFETY AND ENVIRONMENTAL INFORMATION

pH: 2.2 ± 0.5

Flash point: None

Oxidizing properties: Not an oxidizer

Relative density: 1.05 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: Less than water

Solubility: 100% soluble in water

Viscosity: less than 5 centipoise @ 20°C

Evaporation rate: Less than water

10. STABILITY AND REACTIVITY

Conditions to avoid: None known

Materials to avoid: None known

Hazardous decomposition products: None known

11. TOXICOLOGICAL INFORMATION



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COMPONENT SUMMARY

Citric acid mono hydrate

Acute Toxicity: LD₅₀ 11.7g/kg rat (oral)

Potential Health Effects

Eye: Highly irritating, may also be abrasive.

Skin: Causes irritation to skin including redness, itching and pain.

Ingestion: Causes irritation to the gastrointestinal tract such as nausea, vomiting and diarrhea.

Inhalation: Causes irritation to the respiratory tract.

Chronic: May cause tooth enamel erosion.

CARCINOGENICITY: Not expected to occur.

PREPARATION SUMMARY

Acute Toxicity: LD₅₀ estimated to be greater than 5000 mg/kg

LOCAL EFFECTS

Skin contact: Irritating to skin upon repeated or prolonged contact.

Eye contact: Slightly irritating

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

Citric acid mono hydrate: not available

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



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PRODUCT NAME: ENVIROSTAR GREEN ALL PURPOSE NEUTRALIZER

INTERNATIONAL TRANSPORTATION REGULATIONS:

This product is not classified for transportation under ADR/IMDG regulations.

UN number: not applicable

Packing group: not applicable

LAND-ROAD/RAILWAY

Proper shipping name: not applicable

ADR/RID class: not applicable

ADR/RID item number: not applicable

SEA

Proper shipping name: not applicable

IMDG class: not applicable

AIR

Proper shipping name: not applicable

ICAO class: not applicable

Medical First Aid Guide (MFAG): not applicable

Emergency Schedules (EmS): not applicable

Marine Pollutant: none

15. REGULATORY INFORMATION

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

EU REGULATIONS

EU Classification: Classified as non-hazardous according to current legislation (67/548/EEC, 1999/45/EC).

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*.

16. OTHER INFORMATION

Relevant R phrases:

R36/37/38- Irritating to eyes, respiratory system and skin.

Issued by:

Genie G Bost, Regulatory Affairs Manager

Revision information:

15/09/2005, revisions conforming to 2001/58/EC