

# BioSTAR

## All Purpose Digestive Stain Remover & Deodorizer

*An extremely effective stain remover, BioStar doubles as a long lasting deodorizer that isn't harmful to the environment. Great for use on most washable surfaces including restroom floors, walls, surfaces, toilet bowls, urinals, and sinks, BioStar also works on most carpets, upholstery, draperies, and other fabrics!*

### FEATURES

- Removes a wide range of organic stains
- Emulsifies oils & greases
- Destroys odors - long lasting residual action
- Ecologically sound



### RECOMMENDED SURFACES

Restroom floors, walls, surfaces, toilet bowls, urinals, and sinks. Carpets, upholstery, draperies, and other fabrics. Most other washable surfaces. A high solids formula for pots, pans, equipment, and utensils producing long lasting, hard working suds that dissolve even heavy grease and grime.

### PRODUCT DATA

Description:	Stain Remover & Deodorizer
Appearance:	Clear, colorless liquid
Fragrance:	None added
Viscosity (Brookfield):	<10 centipoise @ 68°F (20°C)
pH (undiluted):	7.0 ± 0.5 ASTM E70-97
Density:	9.0 lb per gal @ 68°F 1.08 kg per liter @ 20°C
Freeze/Thaw:	Passes 3 cycles ASTM D3209-93 (1998)
Shelf Life:	2 years, ASTM D1791-93 (1998)

### PRECAUTIONS:

Keep out of reach of children. Keep container sealed when not in use. Avoid freezing. If frozen, allow to return to room temperature slowly and mix thoroughly before using.

### ORDERING INFORMATION

Product #337QT:	12 x 32 ounces per case (12 x 0,95 liter)
Product #337MP:	4 x 1.06 gallon per case (4 x 4 liter)

### DIRECTIONS FOR USE

#### APPLICATIONS

Restroom floors, walls, surfaces, toilet bowls, urinals, and sinks. Carpets, upholstery, draperies, and other fabrics. Most other washable surfaces.

#### DIRECTIONS FOR USE

#### RESTROOMS

Dilute BioStar at 1:16 (8 oz/gallon / 320 ml per 5 liters of water). Apply with mop on floor surfaces and with trigger sprayer on other surfaces. Clean very heavily soiled areas with an all purpose cleaner before applying BioStar.

#### CARPET

Dilute BioStar at 1:16 (8 oz/gallon / 320 ml per 5 liters of water). Apply directly to stains with trigger sprayer. Use brush to work product into fibers. Cover with a plastic sheet to prevent drying for 1 hour. Heavily stained areas may require longer time. Extract carpet following normal procedures.

**NOTE:** Test product in an inconspicuous area for color fastness and self-staining before application.

#### GENERAL DEODORIZING

Dilute BioStar at 1:16 (8 oz/gallon / 320 ml per 5 liters of water). Apply directly to clean surface with trigger sprayer and allow to air dry. Do not spray into the air.

#### GREASE TRAPS & DRAIN LINES

Add 8 oz (320 ml) undiluted product daily and allow to work for at least 1 hour before using system.



**BIOSTAR ALL PURPOSE DIGESTIVE STAIN REMOVER & DEODORIZER**

**LAST REVISION DATE:** 09/20/06  
**MANUFACTURER:** Pioneer Eclipse® Corporation  
 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.

**EVAPORATION RATE:** Less than water  
**FREEZING POINT:** 0°C / 32°F  
**VAPOR DENSITY:** Greater than air  
**VOLATILE BY WEIGHT:** 80 ± 0.5 %  
**VAPOR PRESSURE:** Less than water  
**DENSITY:** 9.0 lb per gal @ 68°F  
 1.08 kg per liter @ 20°C  
**SOLUBILITY IN WATER:** Miscible

**WASTE DISPOSAL:** Dispose of as waste material in accordance with local, state, and federal regulations.

**SECTION I: GENERAL INFORMATION**

**PRODUCT NAME:** BioStar All Purpose Digestive Stain Remover & Deodorizer  
**PRODUCT #:** 337  
**PRODUCT TYPE:** Stain Remover & Deodorizer  
**PRECAUTIONS:** Possible skin and eye irritant. Keep container sealed when not in use. Keep out of reach of children.  
**HEALTH:** 2  
**FLAMMABILITY:** 0  
**REACTIVITY:** 0  
**NFPA HAZARD RATINGS**



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

**SECTION IV: FIRE AND EXPLOSION DATA**

**FLASH POINT:** Non-combustible  
**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 VIII: SPECIAL PROTECTION**

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**  
**EYES:** None required under normal conditions of use. Safety glasses recommended.  
**SKIN:** If prolonged or repeated contact is possible, chemical-resistant clothing (e.g., rubber gloves) is recommended.  
**RESPIRATORY:** No respiratory protection is required if ventilation is adequate.

**ENGINEERING CONTROLS:** Good general room ventilation is expected to be adequate. Local exhaust ventilation (e.g., fans) may be necessary when general ventilation does not keep airborne concentrations below any exposure limits.

**SECTION V: REACTIVITY DATA**

**STABILITY:** Stable  
**HAZARDOUS POLYMERIZATION:** Will not occur.  
**INCOMPATIBILITY (MATERIALS TO AVOID):**  
 Strong acids and bases  
**HAZARDOUS DECOMPOSITION PRODUCTS:** N/A  
**REACTIVITY CONDITIONS:** None

**SECTION IX: SPECIAL PRECAUTIONS**

**HANDLING AND STORAGE:**  
 Storage temperature (MAX. 60°C / 140°F) (MIN. 1°C / 34°F)  
**OTHER PRECAUTIONS:** Keep from freezing; product may coagulate.

**SECTION II: INGREDIENTS**

**INGREDIENT:** Water  
**CAS #:** 7732-18-5  
 %: 70-85  
**OSHA PEL:** N/A  
**ACGIH TLV:** N/A  
**LD<sub>50</sub> SPECIES & ROUTE:** N/A

**INGREDIENT:** Biodegradable Chelant  
**CAS #:** 144538-83-0  
 %: 5-10  
**OSHA PEL:** N/A  
**ACGIH TLV:** N/A  
**LD<sub>50</sub> SPECIES & ROUTE:** >2,000 mg/kg rat, oral

**INGREDIENT:** Biodegradable Anionic Surfactant  
**CAS #:** 5324-84-5  
 %: 5-10  
**OSHA PEL:** N/E  
**ACGIH TLV:** N/E  
**LD<sub>50</sub> SPECIES & ROUTE:** >5,000 mg/kg rat, oral

**INGREDIENT:** Biodegradable Nonionic Surfactant Mixture  
**CAS #:** 68991-48-0  
 %: 5-10  
**OSHA PEL:** N/E  
**ACGIH TLV:** N/E  
**LD<sub>50</sub> SPECIES & ROUTE:** >2,000 mg/kg rat, oral

**SECTION VI: HEALTH HAZARD DATA**

**EYES:** Irritating to eyes. For eye contact, flush with a large amount of water for at least 15 minutes. See a physician if irritation persists.  
**SKIN:** Slightly irritating to skin upon repeated or prolonged contact. For skin contact, wash affected areas with soap and water.  
**INHALATION:** Vapor or mist may cause irritation of the eyes, nose, throat and lungs. For overexposure, move subject to fresh air.  
**INGESTION:** May cause irritation to mouth, esophagus and stomach. If ingested, drink several glasses of water and do not induce vomiting. Seek medical attention.  
**CHRONIC EFFECTS AND MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** Prolonged or repeated contact can cause drying, defatting and dermatitis to skin.  
**CARCINOGEN:** Non-carcinogenic  
**REPRODUCTIVE EFFECTS:** N/E  
**TERATOGENICITY:** N/E  
**MUTAGENICITY:** N/E  
**THRESHOLD LIMIT VALUE:** See Section II.

**SECTION X: ADDITIONAL INFORMATION**

Neither this data sheet nor any statement contained herein grants 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\*\*

**SECTION III: PHYSICAL/CHEMICAL DATA**

**APPEARANCE:** Clear, colorless  
**PHYSICAL STATE:** Liquid  
**pH:** 7.0 ± 0.5  
**BOILING POINT:** 100°C / 212°F

**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.