

# StarShine®

## GLASS & SURFACE CLEANER

*Concentrated , non-butyl glass and surface cleaner*

### FEATURES

- *Cleans mirrors, tile and metallic surfaces with no residue*
- *Non-butyl formula application*
- *Non-streaking*
- *Concentrated for economical use*



### RECOMMENDED SURFACES

Glass, tile, plexiglass and metallic surfaces

### PRODUCT DATA

Description:	Concentrated, non-ammonia, non-butyl glass and surface cleaner
Appearance:	Clear blue liquid
Fragrance:	Fresh and clean
Viscosity (Brookfield):	< 10 centipoise @ 68°F (20°C)
pH (undiluted):	9.0 ± 0.5 ASTM E70 -97
Density:	7.8 lb per gal @68°F 0.94 kg per liter @ 20°C
Flash Point:	128°F (53°C) ASTM D56
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. Keep from open flames. Avoid freezing. If frozen, allow to return to room temperature slowly and mix thoroughly before using.

### ORDERING INFORMATION

Product #313D: 4 X 1.06 gallon per case (4 x 4 liters)

### DIRECTIONS FOR USE:

1. Mix Starshine Glass & Surface Cleaner per the following dilution ratio:  
1:32 4 US oz per gallon water
2. Place solution in a clean spray bottle. Adjust spray nozzle to "mist".
3. Apply to the surface to be cleaned:

**For windows:** Use a squeegee to avoid dripping.

**For mirrors and other surfaces:** Use squeegee or paper towels.

# STARSHINE GLASS & SURFACE CLEANER

**LAST REVISION DATE:** 03/22/06

**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.

## SECTION I: GENERAL INFORMATION

**PRODUCT NAME:** StarShine® Glass and Surface Cleaner

**PRODUCT #:** 313D

**PRODUCT TYPE:** Concentrated non-butyl glass cleaner

**PRECAUTIONS:** Flammable. May be irritant in long term contact with skin. Keep container sealed when not in use. Keep out of reach of children.

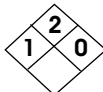
**FLAMMABILITY:** 2

**REACTIVITY:** 0

**HEALTH:** 1

**NFPA HAZARD RATINGS**

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



## SECTION II: HAZARDOUS INGREDIENTS

**INGREDIENT:** 1-Methoxy-2-Propanol

**CAS#:** 107-98-2

**%:** 60-70

**OSHA PEL:** NE

**ACGIH TLV:** 100 ppm (TWA) 150 ppm (STEL)

**LD<sub>50</sub> SPECIES & ROUTE:** 5660 mg/kg rat, oral

**INGREDIENT:** 2-Propanol

**CAS#:** 67-63-0

**%:** 10-20

**OSHA PEL:** 400 ppm (TWA)

**ACGIH TLV:** 400 ppm (STEL) 200 ppm (TWA)

**LD<sub>50</sub> SPECIES & ROUTE:** 5.045 g/kg rat, oral

N/E = Not Established N/L = Not Listed

N/A = Not Applicable

## SECTION III: PHYSICAL/CHEMICAL DATA

**APPEARANCE:** Clear blue liquid

**pH:** 9.0 ± 0.5

**BOILING POINT:** 100°C / 212°F

**EVAPORATION RATE:** Less than water

**FREEZING POINT:** 0°C / 32°

**VAPOR DENSITY:** Greater than air

**VOLATILE BY WEIGHT:** 99+%

**VAPOR PRESSURE:** Less than water

**DENSITY:** 7.8 lb per gal @ 68°F

0.94 kg per liter @ 20°C

**SOLUBILITY IN WATER:** Miscible

## SECTION IV: FIRE AND EXPLOSION DATA

**FLASH POINT:** 128°F (53°C) ASTM D56

**EXPLOSIVE LIMITS:**

LOWER: N/E UPPER: N/E

**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 V: REACTIVITY DATA

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur.

**INCOMPATIBILITY (MATERIALS TO AVOID):**

None Known

**HAZARDOUS DECOMPOSITION PRODUCTS:** N/A

**REACTIVITY CONDITIONS:** None

## SECTION VI: HEALTH HAZARD DATA

**EYES:** Slightly 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 VII: SPILL, LEAK & DISPOSAL PROCEDURES

**SMALL SPILLS:** Absorb spill with inert material (e.g. sand) 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). 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.

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

## 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 IX: SPECIAL PRECAUTIONS

**HANDLING AND STORAGE:**

Storage temperature (MAX. 60°C / 140°F)  
(MIN. 1°C / 34°F)

**OTHER PRECAUTIONS:** Avoid freezing. If frozen, allow to return to room temperature slowly. Mix thoroughly before using.

## 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\*\*

Pioneer Eclipse®