



SAFETY DATA SHEET 313D: CONCENTRATE

Conforms to 1910.1200
Issued: May 26, 2016
Supersedes: May 27, 2015

STARSHINE GLASS AND SURFACE CLEANER

1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: StarShine Glass & Surface Cleaner **Product Number:** 313D

Recommended Use: Non-butyl glass cleaner
Concentrate - Dilute prior to use.
Product intended for commercial and industrial use only.

Uses Advised Against: Other than per labelled instructions

Manufacturer Address:

Amano Pioneer Eclipse Corporation
P.O. Box 909
1 Eclipse Road
Sparta, NC 28675
Telephone: 1-336-372-8080
Email: sds@pioneereclipse.com
Internet: www.pioneereclipse.com

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

Classification: Flammable Liquid - Category 3
Eye Irritation - Category 2
Specific Target Organ Toxicity (Single Exposure) - Category 3

Signal Word: Warning

Pictogram:



Hazard Statements:

Flammable liquid and vapour
Causes serious eye irritation.
May cause drowsiness or dizziness

Precautionary Statements:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Use explosion-proof equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Avoid breathing mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/eye protection/face protection.
Call a POISON CENTER/doctor if you feel unwell.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Hazards: None known

Supplemental Information: None



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3: COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient | CAS Number | Weight % * |
|----------------------|------------|------------|
| 1-methoxy-2-propanol | 107-98-2 | 40 - 70 |
| 2-propanol | 67-63-0 | 10 - 30 |

* Exact concentration of the ingredients has been withheld as a trade secret.

4: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

Eye Contact: Flush eyes with plenty of water, for at least 15 minutes. If easy to do, remove contact lenses if worn. If irritation persists, seek medical attention.

Skin Contact: Wash with soap and plenty of water. If irritation persists, seek medical attention.

Inhalation: If breathing is difficult, remove subject to fresh air. If symptoms persist, seek medical attention.

Ingestion: Call a physician or poison control center. Do not induce vomiting. Seek medical advice.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye Contact: Can be irritating to eyes.

Skin Contact: May cause mild irritation.

Inhalation: Spray mist may cause irritation to nose, throat and lungs.

Ingestion: May cause irritation to mouth, esophagus and stomach.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically.

5: FIRE-FIGHTING MEASURES

Suitable Extinguishing media: Water spray, CO₂ dry chemical, alcohol-type or universal type foams

Specific Hazards: Do not spray a solid stream of water or foam directly in hot liquid. This may cause frothing.

Protective Equipment and Precautions: Fire fighters should wear NIOSH approved breathing apparatus. Materials can splatter above 100° C / 212° F

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Put on personal protective equipment (see Section 8). Keep spectators away. Floors may be slippery: use care to avoid falling.

Environment Precautions: Keep spills and cleaning run-off out of sewers and open bodies of water.

CONTAINMENT AND CLEAN-UP

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: 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.

Waste Disposal: Landfill or incinerate the contaminated solids and diking material in accordance with local, state and federal regulations. Non-salvageable liquid should be drummed and disposed of in accordance with local, state and federal regulations.

7: HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use in well-ventilated areas. Avoid breathing vapors or mists.

Conditions for Safe Storage: Storage temperature (Max. 60°C/140°F - Min. 1°C/34°F)

Other Information: Keep from freezing. Keep container sealed when not in use. Keep out of reach of children.



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8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

| Ingredient | CAS Number | ACGIH | | OSHA | |
|----------------------|------------|---------|---------|---------|------|
| | | TWA | STEL | TWA | STEL |
| 1-methoxy-2-propanol | 107-98-2 | 100 ppm | 150 ppm | N/L | N/L |
| 2-propanol | 67-63-0 | 200 ppm | 400ppm | 400 ppm | N/L |

Engineering Controls: Use only with adequate ventilation. Use local ventilation and other engineering controls to maintain airborne contaminants below established and recommended exposure limits. If this product contains ingredients with exposure limits, monitoring may be required to determine the effectiveness of ventilation and other control measures.

Personal Protective Equipment (PPE)

Eye/Face Protection: Safety eyewear is recommended, to avoid chemical splashes and mists.

Skin Protection: Chemical resistant gloves are recommended.

Respiratory Protection: Respiratory protection should be worn when there is a potential of inadequate ventilation. If exposure limits are exceeded or symptoms are experienced, use an approved respirator.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------------------------|-------------------------------------|
| Appearance: | clear, blue liquid |
| Odor: | Fresh and clean fragrance |
| Odor Threshold: | data not available |
| pH: | 9.0 |
| Freezing Point: | data not available |
| Boiling Point: | data not available |
| Flash Point: | 95 °F / 35 °C |
| Evaporation Rate: | less than water |
| Flammability (solid/gas): | not applicable to liquids |
| Flammability limits: | data not available |
| Vapor Pressure: | data not available |
| Vapor Density: | data not available |
| Relative Density: | 7.8 lb/gal @ 68°F / 0.94kg/l @ 20°C |
| Solubility: | miscible in water |
| Partition Coefficient: | data not available |
| Auto Ignition temperature: | data not available |
| Decomposition Temperature: | data not available |
| Viscosity: | <10 centipoise @ 68 °F (20 °C) |
| VOC: | 77% (as supplied), 2.14% (1:32) |

10: STABILITY AND REACTIVITY

| | |
|--|---|
| Reactivity: | Not reactive under normal conditions. |
| Stability: | Stable under normal conditions. |
| Hazardous reactions: | None expected. |
| Conditions to avoid: | None known. |
| Incompatible materials: | Do not mix with other chemicals unless stated on the product label. |
| Hazardous decomposition products: | None known. |

11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Not determined on product.

LOCAL EFFECTS

| | |
|-------------------------|----------------------------|
| Skin contact: | May cause mild irritation. |
| Eye contact: | Can cause irritation. |
| Sensitization: | None expected |
| Chronic effects: | None expected |

SPECIFIC EFFECTS

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



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COMPONENT INFORMATION

| Component | LD50 Oral-Rat (mg/kg) | LD50 Dermal - Rabbit (mg/kg) | LC ₅₀ Inhalation-Rat (mg/l) |
|----------------------|-----------------------|------------------------------|--|
| 1-methoxy-2-propanol | 5660 | > 5000 | 1000 / 5 hr |
| 2-propanol | > 5000 | > 5000 | > 500 / 1 hr |

Carcinogenicity:

| Component | IARC | NTP | OSHA |
|------------|----------|-----|------|
| 2-propanol | IARC - 3 | N/L | N/L |

12: ECOLOGICAL INFORMATION

Ecotoxicity: Ecological testing has not been completed on the mixture.
Persistence and Degradability: Data not available.
Bioaccumulative Potential: Data not available.
Mobility in Soil: Data not available.
Other Adverse Effects: Data not available.

13: DISPOSAL CONSIDERATIONS

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

14: TRANSPORT INFORMATION

UN Number: UN1993
UN Proper Shipping Name: Flammable liquid, n.o.s. (1-methoxy-2-propanol)
Hazard Class: 3
Packing Group: III
Marine Pollutant: None
Transport in Bulk: N/A
Other Information: Package volumes < 5 L are shipped as Limited Quantity; as permitted by hazard class and quantity limits.

15: REGULATORY INFORMATION

U.S. REGULATIONS/REPORTING:

| Ingredient | CAS Number | SARA 302/304 | SARA 313 | CERCLA |
|------------|------------|--------------|----------|--------|
| 2-propanol | 67-63-0 | N/L | 1%* | N/L |

*- de minimus concentration (strong acid process only)

STATE RIGHT-TO-KNOW STATUS:

| Ingredient | CAS Number | MA - RTK | NJ - RTK | PA - RTK | RI - RTK |
|----------------------|------------|----------|----------|----------|----------|
| 1-methoxy-2-propanol | 107-98-2 | present | present | present | present |
| 2-propanol | 67-63-0 | present | present | present | present |

CALIFORNIA PROPOSITION 65: Components are not present on CA Prop 65 listing.

CANADA REGULATIONS/REPORTING: This product has been classified in accordance with the hazard criteria of the Hazardous Product Regulation (HPR) and the SDS contains the information required by the HPR.

16: OTHER INFORMATION

Abbreviations Used:

N/A - Not applicable
 N/E - Not Established
 N/L - Not Listed
 IARC 3- Unclassifiable as to carcinogenicity in humans.



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Revision Information:

May 26, 2016 - Logo change, email address, minor edits

| | |
|---------------|---|
| | |
| Health: | 2 |
| Flammability: | 3 |
| Reactivity: | 0 |

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This SDS 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****