

STARSHINE GLASS & SURFACE CLEANER

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

Product Name: StarShine Glass & Surface Cleaner
Product Use: Water based glass & surface cleaner

Product Number: 313

Manufacturer Address:
 Amano Pioneer Eclipse Corp.
 P.O. Box 909
 1 Eclipse Road
 Sparta, NC 28675 USA

Contact Information:
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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

This preparation has been classified and labeled according to 1999/45/EC.

EU Classification: Classified as Flammable.

Hazard symbol: None

Risk phrases: R10- Flammable.
 R67- Vapours may cause drowsiness and dizziness.

Safety phrases: S2- Keep out of the reach of children.
 S7- Keep container tightly closed.
 S16- Keep away from sources of ignition – No Smoking.
 S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 S51- Use only in well-ventilated areas.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	EC No.	Weight %	CAS No.	Symbol	R-phrases *
1-methoxy-2-propanol	203-539-1	40 – 70	107-98-2	F (Flammable)	R10 R67
isopropanol	200-661-7	10 – 30	67-63-0	F (Flammable) Xi (Irritant)	R11 R36 R67
2-methoxypropanol	216-455-5	0.1 – 1.0	1589-47-5	F (Flammable) T (Toxic) Xi (Irritant)	R10 R61 R37/38, R41

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

4. FIRST AID MEASURES

EFFECTS AND SYMPTOMS

Inhalation: Vapours may cause drowsiness and dizziness.

Ingestion: May cause irritation to digestive tract.

Skin contact: May cause skin irritation.

Eye contact: May cause eye irritation.

FIRST AID MEASURES

Inhalation: If inhaled, remove to fresh air. If symptoms persist, seek medical attention.

Ingestion: Do not induce vomiting. Seek medical attention immediately.

Skin contact: In case of contact, wash with soap and plenty of water. If irritation persists, seek medical attention.

Eye contact: In case of 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.

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

Eliminate all ignition sources. 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. Use water spray to disperse vapors and dilute spill. 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 and skin. Wash thoroughly after handling. Use in well-ventilated areas. Avoid breathing vapours or spray mists. Keep away from ignition sources.
- Storage:** Storage temperature (Max. 60°C/140°F) (Min. 1°C/34°F). Keep from freezing. Keep container closed when not in use. Keep out of reach of children.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure limit s:

Component Name	Source / Date	Value / Units	Type
1-methoxy-2-propanol	US (ACGIH) / 2010	100 ppm 369 mg/m ³	TWA
1-methoxy-2-propanol	US (ACGIH) / 2010	150 ppm 553 mg/m ³	STEL
1-methoxy-2-propanol (1-methoxypropanol-2)	EU (2000/39/EC) / 2000	100 ppm 375 mg/m ³	8 HR TWA Skin
1-methoxy-2-propanol (1-methoxypropanol-2)	EU (2000/39/EC) / 2000	150 ppm 568 mg/m ³	15 min STEL Skin
isopropanol (2-propanol)	US (ACGIH) / 2010	200ppm 492 mg/m ³	TWA
isopropanol (2-propanol)	US (ACGIH) / 2010	400 ppm 983 mg/m ³	STEL

- Exposure controls:** Ensure adequate general ventilation.
- Environmental exposure controls:** No specific environmental exposure controls required.

PERSONAL PROTECTION

- 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | |
|---|---|
| Appearance: clear, blue liquid | Odor: slight solvent odor |
| Odor threshold: N/E | pH: 9.0 |
| Melting point/Freezing Point: 0 °C | Initial boiling point/boiling range: 100 °C |
| Flash point: 35 °C (ASTM D56) | Evaporation Rate: Less than water |
| Upper/lower flammability/explosive limits: N/E | Vapor pressure: Less than water |
| Vapor density: greater than air | Relative density: 0.94 kg/L @ 20 °C |
| Solubility: 100 % soluble in water | Partition coefficient (n-octanol/water): N/E |
| Auto-ignition temperature: N/E | Decomposition temperature: N/E |
| Viscosity: < 10 cps @ 20 °C | Explosive Properties: N/E |
| Oxidizing properties: Not an oxidizer | VOC: 77% (as supplied), 2.14% (1:32) |

10. STABILITY AND REACTIVITY

- Chemical stability:** Stable under normal conditions
- Hazardous Reactions:** None known
- Conditions to avoid:** None known
- Incompatible materials:** None known
- Hazardous decomposition products:** None known

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11. TOXICOLOGICAL INFORMATION

PREPARATION SUMMARY - Toxicity testing has not been completed on the mixture.

LOCAL EFFECTS

Skin contact: May cause skin irritation.
Eye Contact: May cause eye irritation.
Sensitization: None known
Chronic effects: None known

SPECIFIC EFFECTS

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

COMPONENT SUMMARY *

1-methoxy-2-propanol CAS#107-98-2 & 2-methoxypropanol CAS#1589-47-5 (mixture summary)

LD₅₀: (oral, rat) 5660 mg/kg

Potential Health Effects

Eye: May cause irritation, redness and pain.
Skin: May cause irritation with redness and pain.
Ingestion: Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.
Inhalation: Vapors are irritating to the respiratory tract. Headache, dizziness and drowsiness may occur.
Chronic: Chronic exposure may damage the liver and kidneys.
Carcinogenicity: Not listed as a carcinogen.

isopropanol CAS#67-63-0

LD₅₀: (oral, rat) 5000 mg/kg

Potential Health Effects

Eye: Causes irritation, characterized by burning, redness, tearing and inflammation.
Skin: May cause irritation with pain and stinging.
Ingestion: Causes gastrointestinal irritation with nausea, vomiting and diarrhea.
Inhalation: Causes upper respiratory tract irritation. May cause drowsiness and dizziness.
Chronic: Prolonged or repeat contact may cause defatting of the skin and dermatitis.
Carcinogenicity: Not listed as a carcinogen.

*Component data recorded from available sources pertaining to individual component CAS number.

12. ECOLOGICAL INFORMATION

PREPARATION SUMMARY - Ecological testing has not been completed on the mixture.

COMPONENT SUMMARY *

1-methoxy-2-propanol CAS#107-98-2

LC50, 96hr rainbow trout 19202 mg/l

EC50, 48 hr Daphnia magna 400 mg/l

Environmental Fate: Limited tests suggest the material should be biodegradable with very low soil absorptivity. Not expected to bioconcentrate.

isopropanol CAS#67-63-0

LC50, 96 hr fathead minnow >1000 ppm

EC50, 96hr Daphnia >1000 ppm

Environmental Fate: This material is expected to moderately biodegrade and not expected to bioaccumulate.

2-methoxypropanol CAS#1589-47-5

LC50, 96 hr Pimephales promelas 4998 mg/L

EC50, 48hr Daphnia magna 19000 mg/L

Environmental Fate: This compound is readily biodegradable and is not expected to bioaccumulate.

*Component data recorded from available sources pertaining to individual component CAS number.

13. DISPOSAL CONSIDERATIONS

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

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14. TRANSPORT INFORMATION

INTERNATIONAL TRANSPORTATION REGULATIONS:

UN number: UN1993 Packing group: III

LAND-ROAD/RAILWAY

Proper shipping name: Flammable liquids n.o.s. (1-methoxy-2-propanol and isopropanol)

ADR/RID class: 3

ADR/RID item number: 30°C

SEA

Proper shipping name: Flammable liquids n.o.s. (1-methoxy-2-propanol and isopropanol)

IMDG class: 3

Medical First Aid Guide (MFAG): 330

Emergency Schedules (EmS): Fire F-E, Spillage S-E

Marine Pollutant: none

15. REGULATORY INFORMATION

EINECS Status: Ingredients are included in the EINECS/ELINCS/NLP inventories.

NATIONAL REGULATIONS:

648/2004 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.

No additional national regulations are known to the supplier.

16. OTHER INFORMATION

Product intended for commercial and industrial use only.

R (Risk) phrases:

R10- Flammable.

R11- Highly flammable.

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

R41- Risk of serious damage to eyes.

R61- May cause harm to the unborn child.

R67- Vapours may cause drowsiness and dizziness.

S (Safety) phrases:

S2- Keep out of the reach of children.

S7- Keep container tightly closed.

S16- Keep away from sources of ignition – No Smoking.

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.

S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S51- Use only in well-ventilated areas.

S53- Avoid exposure – obtain special instructions before use.

Detergent/Cleaner Labeling (648/2004)

Amphoteric Surfactant (<5%), Perfume (<5%)

Abbreviations:

N/A = Not Applicable

N/L = Not Listed

N/E = Not Established

Issued by:

Chemical/R&D Department

Amano Pioneer Eclipse Corporation

Revision Information:

11/14/2011 – revisions section 2, 4, 7, 9, 16

04/01/2011 – revisions conforming to 1907/2006/EC amendment 453/2010, Revisions Section 3 & 9

01/11/2010 – revisions conforming to 1907/2006/EC, 1999/45/EC