

STARSHINE™ GLASS & SURFACE CLEANER**1. IDENTIFICATION OF THE MIXTURE (PREPARATION) AND OF THE COMPANY/UNDERTAKING****1.1 PRODUCT IDENTIFIER**

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

1.2 RELEVANT IDENTIFIED USES OF THE MIXTURE AND USES ADVISED AGAINST

Product intended for commercial and industrial use only.

Intended Use: Water based glass & surface cleaner concentrate.

Uses Advised Against: Other than per labelled instructions.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET**Manufacturer:**

Amano Pioneer Eclipse Corporation

P.O. Box 909

1 Eclipse Road

Sparta, NC 28675

Telephone: 1-336-372-8080

Email: msds@pioneer-eclipse.com

Internet: www.pioneereclipse.com

1.4 EMERGENCY TELEPHONE NUMBER**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**2.1 CLASSIFICATION OF THE MIXTURE**

This mixture has been classified according to EC 1272/2008.

CLP Classification: Flammable Liquid - Category 3

Eye Irritation - Category 2

Specific Target Organ Toxicity (Single Exposure) - Category 3

2.2 LABEL ELEMENTS

Signal Word: Warning

Hazard pictogram(s):



Hazard Statement(s):

H226 Flammable liquid and vapour

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness

Precautionary Statement(s):

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P312 Call a POISON CENTER/doctor if you feel unwell.

P303+361+353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338+337+313 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.

STARSHINE™ GLASS & SURFACE CLEANER
2.3 OTHER HAZARDS

No other hazards are known to the supplier

3. COMPOSITION/INFORMATION ON INGREDIENTS
3.1/3.2 SUBSTANCES/MIXTURES

Ingredient	EC No.	Weight %	CAS No.	DSD Classification		CLP Classification	
				Symbol	Risk Phrase(s)*	Hazard Class	Hazard Statement(s)*
1-methoxy-2-propanol	203-539-1	40 – 70	107-98-2	F(Flammable)	R10 R67	Flam Liq 3 STOT SE 3	H226 H336
isopropanol	200-661-7	10 – 30	67-63-0	F(Flammable) Xi (Irritant)	R11 R36 R67	Flam Liq 2 Eye Irrit 2 STOT SE3	H225 H319 H336
2-methoxypropanol	216-455-5	<0.3	1589-47-5	F(Flammable) T (Toxic) Xi (Irritant)	R10 R61 R37/38 R41	Flam Liq 3 Skin Irrit 2 Eye Dam 1 STOTSE 3 Repr 1B	H226 H315 H318 H335 H360D

*See section 16 for the full text of R phrases and Hazard Statements

4. FIRST AID MEASURES
4.1 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.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye Contact: Can be irritating to eyes.
Skin Contact: May cause mild irritation.
Inhalation: Vapours may cause drowsiness and dizziness.
Ingestion: May cause irritation to digestive tract.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically.

5. FIRE FIGHTING MEASURES
5.1 EXTINGUISHING MEDIA

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

5.2 SPECIAL HAZARDS ARISING FROM THE MIXTURE

Hazardous combustion products: None known

5.3 ADVICE FOR FIRE FIGHTERS

Unusual fire and explosion hazards: Materials can splatter above 100°C/212°F.
 Special firefighting procedures: None known

6. ACCIDENTAL RELEASE MEASURES
6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Refer to Section 8 for appropriate personal protective equipment.

6.2 ENVIRONMENTAL PRECAUTIONS

Keep spills and cleaning runoff out of sewers and open bodies of water.

STARSHINE™ GLASS & SURFACE CLEANER
6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

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.

6.4 REFERENCE TO OTHER SECTIONS: Refer to Section 8 of the SDS.

7. HANDLING AND STORAGE
7.1 PRECAUTIONS FOR SAFE HANDLING

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use in well-ventilated areas. Avoid breathing vapours or spray mists. Keep away from ignition sources.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage temperature (Max. 60°C/140°F) (Min. 1°C/34°F). Keep from freezing. Keep container sealed when not in use. Keep out of reach of children.

7.3 SPECIFIC END USE(S): No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 CONTROL PARAMETERS

Ingredient	Source	TWA (8hours)		STEL (Short term)		Note(s)
		ppm	mg/m ³	ppm	mg/m ³	
1-methoxy-2-propanol (1-methoxypropanol-2)	ACGIH TLV	50	184	100	369	
	EU (2000/39/EC)	100	375	150	568	Skin
	NO – Forskrift, best.nr. 704	50	180	-	-	H
	EH40	100	375	150	560	Sk
	DE (TRGS 900)	100	370	-	-	2(I), Y
	DFG MAKs	100	370	-	-	I(2), C25
	DK - At-Vejledning Stoffer og materialier- C.0.1	50	185	-	-	E

Ingredient	Source	TWA (8hours)		STEL (Short term)		Note(s)
		ppm	mg/m ³	ppm	mg/m ³	
isopropanol (2-propanol)	ACGIH TLV	200	492	400	984	
	NO – Forskrift, best.nr. 704	100	245	-	-	
	EH40	400	999	500	1250	
	DE (TRGS 900)	200	500	-	-	2(II), Y
	DFG MAKs	200	500	-	-	II (2)

Ingredient	Source	TWA (8hours)		STEL (Short term)		Note(s)
		ppm	mg/m ³	ppm	mg/m ³	
2-Methoxy-1-propanol	NO – Forskrift, best.nr. 704	20	75	-	-	HR
	DE (TRGS 900)	5	19	-	-	8(II), H, Z
	DFG MAKs	5	19	-	-	II (8), Skin, B
	DK - At-Vejledning Stoffer og materialier- C.0.1	20	75	-	-	-

8.2 EXPOSURE CONTROLS

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.

STARSHINE™ GLASS & SURFACE CLEANER

Environmental exposure controls: No specific environmental exposure controls known.

Personal Protective Equipment (PPE)

Eye/Face Protection: Safety eyewear is recommended, to avoid chemical splashes and mists.
 Hand Protection: Chemical resistant gloves are recommended.
 Skin Protection: If major exposure is possible, wear suitable protection such as rubber boots, apron, etc.
 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.

9. PHYSICAL AND CHEMICAL PROPERTIES
9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance: clear, blue liquid
 Odor: clean & fresh fragrance
 Odor Threshold: N/E
 pH: 9.0
 Freezing Point: N/E
 Initial boiling point/boiling range: N/E
 Flash Point: 35 °C
 Evaporation Rate: N/E
 Upper/lower flammability/explosive limits: N/E
 Vapor Pressure: N/E
 Vapor Density: N/E
 Relative Density: 0.94 kg/L @ 20°C
 Solubility: miscible in water
 Partition Coefficient (n-octanol/water): N/E
 Auto Ignition temperature: N/E
 Decomposition Temperature: N/E
 Viscosity: <10 centipoise @ 20°C
 Explosive Properties: N/A
 Oxidizing properties: N/E

9.2 OTHER INFORMATION

VOC: 77% (as supplied), 2.14% (1:32)

10. STABILITY AND REACTIVITY

10.1 REACTIVITY: None known
 10.2 CHEMICAL STABILITY: Stable under normal conditions.
 10.3 POSSIBILITY OF HAZARDOUS REACTIONS: None expected
 10.4 CONDITIONS TO AVOID: None known
 10.5 INCOMPATIBLE MATERIALS: Strong acids, bases and oxidizing agents.
 10.6 HAZARDOUS DECOMPOSITION PRODUCTS: None known

11. TOXICOLOGICAL INFORMATION
11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY: Toxicity testing has not been completed on the mixture.
 Based on available data, the classification criteria are not met.

Component	CAS #	LD50 Oral-Rat (mg/kg)	LD50 Dermal - Rabbit (mg/kg)	LC ₅₀ Inhalation-Rat (mg/l)
1-methoxy-2-propanol	107-98-2	5660	> 5000	1000 / 5 hr
isopropanol	67-63-0	> 5000	> 5000	> 500 / 1 hr
2-methoxypropanol	1589-47-5	5660	> 5000	not available

STARSHINE™ GLASS & SURFACE CLEANER

SKIN CORROSION/IRRITATION:	Based on available data, the classification criteria are not met.
SERIOUS EYE DAMAGE/IRRITATION:	Classified as Eye Irritant - Category 2.
RESPIRATORY OR SKIN SENSITIZATION:	Based on available data, the classification criteria are not met.
GERM CELL MUTAGENICITY:	Based on available data, the classification criteria are not met.
CARCINOGENICITY:	Based on available data, the classification criteria are not met.
REPRODUCTIVE TOXICITY:	Based on available data, the classification criteria are not met.
STOT-SINGLE EXPOSURE:	Based on available data, the classification criteria are not met.
STOT-REPEATED EXPSURE:	Based on available data, the classification criteria are not met.
ASPIRATION HAZARD:	Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

12.1 TOXICITY: Ecological testing has not been completed on the mixture.

Component	CAS #	LC50 - 96 hr	EC50-48 hr	LC50
1-methoxy-2-propanol	107-98-2	vertebrate, 19202 mg/l	Daphnia magna, 400 mg/l	not available
isopropanol	67-63-0	vertebrate, >100 mg/l	Daphnia magna, >1000 mg/l	algae (72hr), >1000 mg/l
2-methoxypropanol	1589-47-5	vertebrate, 4998 mg/l	Daphnia magna, 19000 mg/l	not available

12.2 PERSISTANCE AND DEGRADABILITY: No data available.

Component	CAS #	Biodegradation
1-methoxy-2-propanol	107-98-2	readily biodegradable
isopropanol	67-63-0	readily biodegradable
2-methoxypropanol	1589-47-5	readily biodegradable

12.3 BIOACCUMULATIVE POTENTIAL: No data available.

Component	CAS #	Partition coefficient n-octanol/water (Log Kow)	Bioconcentration factor (BCF)
1-methoxy-2-propanol	107-98-2	not available	3.16
isopropanol	67-63-0	0.05	3
2-methoxypropanol	1589-47-5	not available	not available

12.4 MOBILITY IN SOIL: No data available.

Component	CAS #	Soil Organic Carbon-Water Partitioning Coefficient (Koc)
1-methoxy-2-propanol	107-98-2	not available
isopropanol	67-63-0	25
2-methoxypropanol	1589-47-5	not available

12.5 RESULTS OF PBT AND vPvB ASSESSMENT: No data available.

12.6 OTHER ADVERSE EFFECTS: No data available.

12.7 ADDITIONAL INORMATION: Mixture is not classified with aquatic hazards.

13. DISPOSAL CONSIDERATIONS
13.1 WASTE TREATMENT METHODS

Disposal of this material should be in accordance with local, regional and national regulations.
 EU Waste Catalogue: 20 01 29*

STARSHINE™ GLASS & SURFACE CLEANER**14. TRANSPORT INFORMATION**

- 14.1 **UN NUMBER:** UN1993
- 14.2 **UN PROPER SHIPPING NAME:** Flammable liquids n.o.s. (1-methoxy-2-propanol and isopropanol)
- 14.3 **TRANSPORT HAZARD CLASSES:** 3
- 14.4 **PACKING GROUP:** III
- 14.5 **ENVIRONMENTAL HAZARDS:** N/A
- 14.6 **SPECIAL PRECAUTIONS FOR USER:**

Package volumes < 5 L are shipped as Limited Quantity; as permitted by hazard class and quantity limits.

IMDG

Emergency Schedules (EmS): Fire F-E, Spillage S-B
Stowage and Segregation: Category A.
Marine Pollutant: None

ADR/RID

Class: 3
Item Number: 30
Classification Code: F1

- 14.7 **TRANSPORT IN BULK ACCORDING TO ANNEX II OF MAPROL73/78 AND THE IBC CODE:** N/A

15. REGULATORY INFORMATION**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE MIXTURE**

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

NATIONAL REGULATIONS:

648/2004 The surfactants contained in this preparation comply 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.

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

- 15.2 **CHEMICAL SAFETY ASSESSMENT:** No information available.

16. OTHER INFORMATION**REVISION INFORMATION:**

July 27, 2015 - SDS issued per EC 1272/2008.

ABBREVIATIONS:

N/A - Not applicable
N/E - Not Established
N/L - Not Listed

DETERGENT/CLEANER LABELING (EC/648/2004):

<5% - amphoteric surfactant, perfume

FULL TEXT OF HAZARD STATEMENTS:

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H360D May damage the unborn child.

STARSHINE™ GLASS & SURFACE CLEANER**FULL TEXT OF PRECAUTIONARY STATEMENTS:**

P241	Use explosion-proof equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/eye protection/face protection.
P370+378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403+233+235	Store in a well-ventilated place. Keep container tightly closed. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

ISSUED BY:

Chemical/R&D Department
Amano Pioneer Eclipse Corporation