



## SAFETY DATA SHEET

Conforms to 1907/2006/EC - (EU) 2015/830

Issued: June 7, 2016

Supersedes: Mar. 21, 2016

### STARSHINE™ GLASS & SURFACE CLEANER

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE 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: sds@pioneereclipse.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)

#### SECTION 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.

##### 2.3 OTHER HAZARDS

No other hazards are known to the supplier

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**STARSHINE™ GLASS & SURFACE CLEANER****SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1/3.2 SUBSTANCES/MIXTURES**

Ingredient	EC No.	Weight %	CAS No.	CLP Classification	
				Hazard Class	Hazard Statement(s)*
1-methoxy-2-propanol	203-539-1	40 – 70	107-98-2	Flam Liq 3 STOT SE 3	H226 H336
isopropanol	200-661-7	10 – 30	67-63-0	Flam Liq 2 Eye Irrit 2 STOT SE3	H225 H319 H336
2-methoxypropanol	216-455-5	<0.3	1589-47-5	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 Hazard Statements

**SECTION 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.

**SECTION 5: FIRE FIGHTING MEASURES****5.1 EXTINGUISHING MEDIA**

In case of fire: use dry sand, dry chemical, alcohol resistant foam

**5.2 SPECIAL HAZARDS ARISING FROM THE MIXTURE**

Hazardous combustion products: CO, CO<sub>2</sub>

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include but not limited to the above mentioned substances.

**5.3 ADVICE FOR FIRE FIGHTERS**

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection. Fire-fighters should wear clothing conforming to EN469 for chemical incidents. Materials can splatter above 100°C/212°F.

**SECTION 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.



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### 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. Neutralize spill area. 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.

## SECTION 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

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 CONTROL PARAMETERS

Ingredient	Source	TWA (8hours)		STEL (Short term)		Note(s)
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
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 <sup>3</sup>	ppm	mg/m <sup>3</sup>	
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 <sup>3</sup>	ppm	mg/m <sup>3</sup>	
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	-	-	-



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#### 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.

**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. Safety glasses or goggles (EN166).

**Hand Protection:** Chemical resistant gloves are recommended. (EN374).  
Protective gloves should be selected according to the application and duration of use. Workplace selection should take into consideration handling requirements, physical requirements and exposure to other substances.

**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 with multi-purpose combination filter. (E.g. - EN 14387- ABEK)

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	clear, blue liquid	
Odor:	slight solvent odor	
Odor Threshold:	No test data available	
pH:	9.0	[Method: ASTM E 70]
Melting Point/Freezing Point:	No test data available	
Initial boiling point/boiling range:	No test data available	
Flash Point:	35 °C	[Method: Closed cup, ASTM D 56]
Evaporation Rate:	No test data available	
Flammability (solid, gas)	Not applicable to liquids	
Upper/lower flammability/explosive limits:	No test data available	
Vapor Pressure:	No test data available	
Vapor Density:	No test data available	
Relative Density:	0.94 kg/L @ 20°C	[Method: Pycnometer, ASTM D 1475]
Solubility:	miscible in water	
Partition Coefficient (n-octanol/water):	No test data available	
Auto Ignition temperature:	No test data available	
Decomposition Temperature:	No test data available	
Viscosity:	<10 centipoise @ 20°C	[Method: Rotational viscometer, Brookfield]
Explosive Properties:	None	
Oxidizing properties:	None	

#### 9.2 OTHER INFORMATION

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

#### SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY:	None known
10.2 CHEMICAL STABILITY:	Stable under normal conditions.
10.3 POSSIBILITY OF HAZARDOUS REACTIONS:	None known
10.4 CONDITIONS TO AVOID:	None known
10.5 INCOMPATIBLE MATERIALS:	Do not mix with other chemicals unless stated on the product label.
10.6 HAZARDOUS DECOMPOSITION PRODUCTS:	None known



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### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

**ACUTE TOXICITY:**

Toxicity testing has not been completed on the mixture.

ATE<sub>mix</sub> (oral): > 2000 mg/kg

Based on available data, the classification criteria are not met.

ATE<sub>mix</sub> (dermal): > 2000 mg/kg

ATE<sub>mix</sub> (inhalation): > 20 mg/l (4 hr/vapour)

Component	CAS #	LD50 Oral-Rat (mg/kg)	LD50 Dermal - Rabbit (mg/kg)	LC <sub>50</sub> 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

**SKIN CORROSION/IRRITATION:**

Based on available data, the classification criteria are not met.

**SERIOUS EYE DAMAGE/IRRITATION:**

Causes serious eye 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.

#### 11.2 POTENTIAL ADVERSE HEALTH EFFECTS

Effects and symptoms related to this mixture, if any, are listed in Section 4.2.

### SECTION 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:

Testing has not been completed on the mixture.

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:

Testing has not been completed on the mixture.

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

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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:** Not applicable**12.6 OTHER ADVERSE EFFECTS:** None known**12.7 ADDITIONAL INFORMATION:** Mixture is not classified with Aquatic hazards.**SECTION 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\*

**SECTION 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 &lt; 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**SECTION 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.**15.2 CHEMICAL SAFETY ASSESSMENT:** No information available.



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#### SECTION 16: OTHER INFORMATION

##### REVISION INFORMATION:

June 7, 2016 - Logo, Revisions per (EU) 2015/830, Sections 5, 8, 9 & 11

##### ABBREVIATIONS:

N/A - Not applicable

N/E - Not Established

N/L - Not Listed

##### DETERGENT/CLEANER LABELING: (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.

##### 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.

Safety data sheet available on request.

##### ISSUED BY:

Chemical/R&D Department

Amano Pioneer Eclipse Corporation