



SAFETY DATA SHEET

Conforms to 1907/2006/EC - (EU) 2020/878

Issued: 19 Oct 2022

Supersedes: 30 Nov 2020

DIAMOND SHINE™

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIER

Product Name: Diamond Shine Ultra High Speed Floor Coating Product Number: 104L5
UFI: VMC9-7922-0005-59XE

1.2 RELEVANT IDENTIFIED USES OF THE MIXTURE AND USES ADVISED AGAINST

Product intended for commercial and industrial use only.
Intended Use: Floor finish
Uses Advised Against: Other than per labelled instructions.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

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.
Classification: Skin sensitisation - Category 1
Hazardous to the aquatic environment, Chronic Hazard - Category 2

2.2 LABEL ELEMENTS

Signal Word: Warning

Hazard pictograms:



Contains: Benzisothiazolinone; Zinc (2+) ion tetraamine carbonate; Maleic anhydride; Octylisothiazolinone.

Hazard Statements:

H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P261 Avoid breathing vapours.
P273 Avoid release to the environment.
P280 Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

2.3 OTHER HAZARDS No other hazards are known to the supplier.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1/3.2 SUBSTANCES/MIXTURES



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Ingredient	EC No.	Weight %	CAS No.	REACH-No.	CLP Classification	
					Hazard Class	Hazard Statement(s)*
Zinc(2+) ion tetraamine carbonate	254-099-2	1 - < 5	38714-47-5		Skin Irrit 2 Eye Irrit 2 Skin Sens 1 AquaAcute1 AquaChr3	H315 H319 H317 H400 H410
Tributoxyethylphosphate	201-122-9	1 - < 5	78-51-3	01- 2119485835 -23	AquaChr 3	H412
Trimethyl pentanyl diisobutyrate	229-934-9	1 - < 5	6846-50-0	01- 2119451093 -47	Repr 2 AquaChr 3	H361d H412
1-Methoxy-2-propanol	203-539-1	< 0.1	107-98-2	01- 2119457435 -35	Flam Liq 3 STOT SE 3	H226 H336
1,2-Benzisothiazol-3(2H)-one	220-120-9	< 0.1	2634-33-5	01 2120761540 -60	AcuteTox 4 Skin Irrit 2 Eye Dam 1 Skin Sens 1 AquaAcute1	H302 H315 H318 H317 H400
Maleic anhydride	203-571-6	< 0.1	108-31-6		AcuteTox 4 STOT RE 1 Skin Corr 1B Eye Dam 1 Resp Sens 1 Skin Sens 1A	H302 H372 H314 H318 H334 H317
Octhiline (ISO); 2-octyl-2H-isothiazol-3-one	247-761-7	< 0.1	26530-20-1	01- 2120768921- 45	AcuteTox 2 AcuteTox 3 Skin Corr 1 Skin Sens 1A Eye Dam 1 AquaAcute1 AquaChr1	H330 H301, H311 H314 H317 H318 H400 H410

*See section 16 for the full text of (EU) Hazard Statements

Ingredient	EC No.	CAS No.	Specific Concentration Limits M-Factors ATE**
1,2-Benzisothiazol-3(2H)-one	220-120-9	2634-33-5	(0.05 ≤ C ≤ 100) Skin Sens 1, H317
Maleic anhydride	203-571-6	108-31-6	(0.001 ≤ C ≤ 100) Skin Sens 1A, H317
Octhiline (ISO); 2-octyl-2H-isothiazol-3-one	247-761-7	26530-20-1	(0.0015 ≤ C ≤ 100) Skin Sens 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) ATE (oral) 125 mg/kg ATE (dermal) 311 mg/kg ATE (inhalation, mist) 0.27 mg/l

** Acute Toxicity Estimate per Annex VI, (EC) 1272/2008.

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

Eye Contact:	In case of eye contact, immediately rinse with clean water for 10-15 minutes. If eye irritation persists: Get medical advice/attention.
Skin Contact:	Wash skin with mild soap and water. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation:	If experiencing respiratory symptoms: Allow affected person to breathe fresh air.
Ingestion:	Rinse mouth. Do NOT induce vomiting. Give water to drink. Seek medical advice immediately and show this container or label.



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4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

This mixture is not expected to produce significant adverse health effects when recommended use instructions are followed.

Eye Contact: May cause slight irritation. Redness.

Skin Contact: None expected under normal use. Contact for an extended time may cause mild irritation. Redness.

Inhalation: None expected under normal use.

Ingestion: May cause irritation of the linings of the mouth, throat and gastrointestinal tract.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

In case of any doubt or when irritation occurs or persists seek medical advice. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

In case of fire: use dry chemical, water spray, foam, carbon dioxide.

5.2 SPECIAL HAZARDS ARISING FROM THE MIXTURE

The product itself does not maintain combustion.

5.3 ADVICE FOR FIRE FIGHTERS

Use fire fighting measures that suit the environment. 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

Material spilled on hard surface can present a serious slipping/falling hazard.

6.2 ENVIRONMENTAL PRECAUTIONS

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

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 - Personal precautions

Refer to Section 7 of the SDS - Precautions in handling and storage

Refer to Section 13 of the SDS - Waste disposal recommendations

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Avoid contact with eyes and skin. Wash thoroughly after handling. Use in well-ventilated areas.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage temperature (Min. 1°C - Max. 60°C). 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



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Workplace Exposure Limits:

Ingredient	Source	TWA (8hours)		STEL (Short term)		Note(s)
		ppm	mg/m ³	ppm	mg/m ³	
1-Methoxy-2-propanal (CAS# 107-98-2)	ACGIH TLV	50	184	100	369	
	DE (TRGS 900)	-	-	100	370	2(l) DFG, EU,Y
	DK - At-Vejledning Stoffer og materialier- C.0.1	50	185	-	-	E
	EU (2000/39/EC)	100	375	150	568	Skin
	NO – Forskrift, best.nr. 704	50	180	-	-	H *
	NL - Grensuarde TGG	-	375	-	563	H
	EH40	100	375	150	560	Sk

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: Under normal use of this product, eye protection not necessary. If there is a risk of liquid being splashed: Wear eye protection.

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.

Respiratory Protection: Under normal use of this product, respiratory protection not necessary. 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)

Hygiene Measures: Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	white, opaque
Odour:	slight odor characteristic of raw material, no added fragrance
Melting point/Freezing point:	± 0 °C
Boiling point/Boiling range:	± 100°C
Flammability:	Does not maintain combustion.
Lower and upper explosion limits:	No data available
Flash Point:	> 90°C
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	9 - 10
Kinematic viscosity:	< 10 mm ² /s
Solubility:	Water, completely soluble
Partition coefficient n-octanol/water [log Pow]:	-0.79 (calculated value)
Vapor pressure:	23.4 hPa
Density:	1.03 g/cm ³
Relative vapor density:	No data available
Particle characteristics:	Not applicable to liquids



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9.2 OTHER INFORMATION

9.2.1 - Information with regard to physical hazard class:

Oxidising properties: Not established

Explosive properties: Not established

9.2.2 - Other safety characteristics:

Relative evaporation rate (butylacetate=1): < 1

VOC: 8.49%

SECTION 10: STABILITY AND REACTIVITY

- 10.1 REACTIVITY:** Stable under normal conditions.
- 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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON HAZARD CLASSES AS DEFINED BY REGULATION (EC) 1272/2008

ACUTE TOXICITY: Toxicity testing has not been completed on the mixture.

ATE_{mix} (oral): > 2000 mg/kg

ATE_{mix} (dermal): > 2000 mg/kg

ATE_{mix} (inhalation): > 20 mg/l (4 hr/vapour)

Based on criteria 3.1.3 from (EC) 1272/2008, the Acute Toxicity classification criteria are not met.

Components details are given below:

Component	CAS #	LD50 Oral Rat	LD50 Dermal Rabbit	LC50 Inhalation Rat (Dust/Mist)
Tributoxyethylphosphate	78-51-3	3000 mg/kg	> 5000 mg/kg	> 6.4 mg/l
Trimethyl pentanyl diisobutyrate	6486-50-0	> 2000 mg/kg	> 2000 mg/kg	> 0.12 mg/l (6h)
1-Methoxy-2-propanol	107-98-2	3739 mg/kg	> 2000 mg/kg	> 26315 mg/l (4h)
1,2-Benzisothiazol-3(2H)-one	2634-33-5	1020 mg/kg	4115 mg/kg	100 mg/l (4h)
Octhilinone (ISO); 2-octyl-2H-isothiazol-3-one	2634-33-5	ATE (oral) 125 mg/kg	ATE (dermal) 311 mg/kg	ATE (inhalation-mist) 0.27 mg/l

SKIN CORROSION/IRRITATION: Based on available data, the classification criteria are not met.

SERIOUS EYE DAMAGE/IRRITATION: Based on available data, the classification criteria are not met.

RESPIRATORY OR SKIN SENSITIZATION: Classified as Skin sensitisation - Category 1.
May cause an allergic skin reaction

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 INFORMATION ON OTHER HAZARDS

11.2.1 Endocrine disrupting properties: None known

11.2.2 Other information: No additional information available



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SECTION 12: ECOLOGICAL INFORMATION

- 12.1 TOXICITY:** Ecological testing has not been completed on the mixture.
Classified as Hazardous to the aquatic environment, Chronic Hazard - Category 2
Toxic to aquatic life with long lasting effects.

Component	CAS #	LC50 fish (96 h)	EC50 Daphnia (48 h)	EC50 Algae (72 h)
Tributoxyethylphosphate	78-51-3	24 mg/l	75 mg/l	61 mg/l
Trimethyl pentanyl diisobutyrate	6846-50-0	≥ 6 mg/l	≥ 1.46 mg/l	> 7.49 mg/l
1-Methoxy-2-propanol	107-98-2	> 4600 mg/l	23300 mg/l	> 500 mg/l
1,2-Benzisothiazol-3(2H)-one	2634-33-5	2.18 mg/l	2.94 mg/l	0.11 mg/l

12.2 PERSISTENCE AND DEGRADABILITY:

Component	CAS #	Biodegradability
Tributoxyethylphosphate	78-51-3	Readily biodegradable
Trimethyl pentanyl diisobutyrate	6846-50-0	70.73% 28 days, Moderately biodegradable
1-Methoxy-2-propanol	107-98-2	Readily biodegradable

12.3 BIOACCUMULATIVE POTENTIAL:

Component	CAS #	Partition coefficient n-octanol/water (Log Pow)
Diamond Shine UHS Floor Coating	mixture	-0.79 (calculated)
Tributoxyethylphosphate	78-51-3	3.75
Trimethyl pentanyl diisobutyrate	6846-50-0	4.04 - 4.91
1-Methoxy-2-propanol	107-98-2	1
1,2-Benzisothiazol-3(2H)-one	2634-33-5	0.7

- 12.4 MOBILITY IN SOIL:** Testing has not been completed on the mixture.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT:

Diamond Shine UHS Floor Coating	This mixture does not meet the PBT criteria of REACH regulation, Annex XIII. This mixture does not meet vPvB criteria of REACH regulation, Annex XIII.
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- 12.6 ENDOCRINE DISRUPTING PROPERTIES:** None known

- 12.7 OTHER ADVERSE EFFECTS:** No additional information available.

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: 16 03 05* Organic wastes containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

Product is not regulated as hazardous for transport. See IATA SP-A197, IMDG 2.10.2.7 and ADR SP-375.

- 14.1 UN NUMBER:** None
14.2 UN PROPER SHIPPING NAME: None
14.3 TRANSPORT HAZARD CLASSES: None
14.4 PACKING GROUP: None
14.5 ENVIRONMENTAL HAZARDS: None
14.6 SPECIAL PRECAUTIONS: None
14.7 MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS: Product is not transported in bulk.



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SECTION 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE MIXTURE

Does not contain substances or labelled product uses subject to REACH Annex XVII restriction.

See Annex XVII of Regulation (EC) 1907/2006 for Designation of the substances and Conditions of restriction.

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to EU 649/2012

Contains no substance subject to EU 2019/1021

15.2 CHEMICAL SAFETY ASSESSMENT: No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

REVISION INFORMATION:

19 Oct 2022 - Revisions per (EU) 2020/878; § 1, 2, 3, 4, 7, 8, 9, 11, 12, 14, & 16

ABBREVIATIONS:

ACGIH	American Conference of Governmental Industrial Hygienists
ADR SP	Agreement concerning the International Carriage of Dangerous Goods by Road Special Provision
ATE	Acute Toxicity Estimate
CAS No.	Chemical Abstract Service Number
CLP	Classification Labeling Packaging Regulation (EC) 1272/2008
EC50	Median Effective Concentration.
EC No.	European Union Identification Number
IATA SP	International Air Transport Association Special Provision
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LC50	Median Lethal Concentration
LD50	Median Lethal Dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation, (EC) 1907/2006
SDS	Safety Data Sheet
STEL	Short-Term Exposure Limit
TWA	Time Weighted Average
UFI	Unique Formula Identifier
UN	United Nations
VOC	Volatile Organic Compound
vPvB	Very Persistent and Very Bioaccumulative

CLASSIFICATION ACCORDING TO EC 1272/2008:

Classification and procedure used to derive the classification for mixture:		
Skin Sens 1	H317	Calculation method
Aquatic Chronic 2	H411	Calculation method

FULL TEXT OF HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.



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H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

FULL TEXT OF PRECAUTIONARY STATEMENTS:

EUH210	Safety data sheet available on request.
P272	Contaminated work clothing should not be allowed out of the workplace.
P321	Specific treatment (see the label).
P362+P364	Take off contaminated clothing and wash it before reused.
P391	Collect spillage.
P501	Dispose of contents/container in accordance with local, regional and national regulations.

ISSUED BY:

Chemical/R&D Department
Amano Pioneer Eclipse Corporation

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