

SAFETY DATA SHEET

This safety data sheet complies with the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issue Date 22-May-2018

Revision Date 22-May-2018

Version 1

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

1.1. Product identifier

Product Name Amethyst A20-RIG Black

Contains Urethane Acrylate, Proprietary Acrylic Ester Derivative, phenylbis(2,4,6-trimethylbenzoyl)-phosphine oxide, Diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide, Multifunctional Polyester Acrylate, 2-Benzyl-2-dimethylamino-1-(4-morpholinophenyl)butan-1-one

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Digital Printing

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer NUTEC DIGITAL INK (PTY) LTD. 1 CLIFFORD STREET OTTERY, 7800 SOUTH AFRICA For further information, please contact

Contact Point Regulatory Department **1.4. Emergency telephone number**

Emergency Telephone New Zealand: **0800 POISON** (0800 764 766)

Suppliers Details
Hitech-Ink
Unit 4 / 231 Annex Road
Middleton 8025
Ph 03 666 0100

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitization	Category 1 - (H317)
Reproductive Toxicity	Category 1B - (H360)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Chronic aquatic toxicity	Category 3 - (H412)

Classification according to Directive 67/548/EEC or 1999/45/EC

Full text of R-phrases: see section 16

2.2. Label elements Product identifier

Contains Urethane Acrylate, Proprietary Acrylic Ester Derivative, phenylbis(2,4,6-trimethylbenzoyl)-phosphine oxide, Diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide, Multifunctional Polyester Acrylate, 2-Benzyl-2-dimethylamino-1-(4-morpholinophenyl)butan-1-one

**Signal word**

Danger

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H317 - May cause an allergic skin reaction

H360 - May damage fertility or the unborn child

H412 - Harmful to aquatic life with long lasting effects

May cause respiratory irritation. May cause drowsiness or dizziness

Contains 2-phenoxyethyl acrylate, 1,6-Hexanediol diacrylate, Oxybis(methyl-2,1-ethanediyl diacrylate, Propoxylated neopentyl glycol EUH208 - May produce an allergic reaction

Precautionary Statements - EU (§28, 1272/2008)

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P280 - Wear eye protection/ face protection

P201 - Obtain special instructions before use

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P202 - Do not handle until all safety precautions have been read and understood

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS
--

3.1 Substances

Chemical Name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Urethane Acrylate	289-200-9	86178-38-3	<70	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	No data available
Proprietary Acrylic Ester Deivative	Listed	-	<15	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	No data available
Multifunctional Amine Acrylate	-	67906-98-3	<10	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	No data available
phenylbis(2,4,6-trimethylbenzoyl)-phosphine oxide	423-340-5	162881-26-7	<10	Skin Sens. 1 (H317) Aquatic Chronic 4 (H413)	No data available

Diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide	278-355-8	75980-60-8	<5	Skin Sens. 1 (H317) Repr. 2 (H361) Aquatic Chronic 2 (H411)	No data available
Multifunctional Polyester Acrylate	239-701-3	15625-89-5	<5	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317)	No data available
Black Pigment	Listed	-	<5	Not Classified	No data available
2-phenoxyethyl acrylate	256-360-6	48145-04-6	<1	Eye Dam. 1 (H318) Skin Sens. 1 (H317)	No data available
				Aquatic Chronic 2 (H411)	
1,6-Hexanediol diacrylate	235-921-9	13048-33-4	<10	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Aquatic Chronic 3 (H412)	No data available
Propoxylated neopentyl glycol	-	84170-74-1	<10	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) STOT SE 3 (H335)	No data available
Oxybis(methyl-2,1-ethanediyl diacrylate	260-754-3	57472-68-1	<10	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317)	No data available

Full text of R-phrases: see section 16

Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation Remove to fresh air.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Ingestion Clean mouth with water and drink afterwards plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Ensure adequate ventilation, especially in confined areas.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Collect spillage.

6.3. Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place.

Incompatible materials

None known based on information supplied.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Black Pigment	-	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³	TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³	-
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Black Pigment	-	TWA: 3.5 mg/m ³	-	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³	TWA: 3.5 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Black Pigment	-	-	TWA: 4.0 mg/m ³	TWA: 3.5 mg/m ³ STEL: 3.5 mg/m ³	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Skin and body protection

Suitable protective clothing.

Environmental exposure controls

No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state liquid
Appearance Liquid
Color black

Odor Characteristic
Odor threshold No information available

Property

Values

Remarks • Method

pH

No information available

Melting point / freezing point

Boiling point / boiling range

100 °C / 212 °F

Flash point

> 100 °C / > 212 °F

Evaporation rate

No information available

Flammability (solid, gas)

No information available

Flammability Limit in Air

No information available

Upper flammability limit:

available

Lower flammability limit:

No information available

Vapor pressure

available

Vapor density

No information available

Relative density

Immiscible in water

Water solubility

available

Solubility(ies)

Partition coefficient

No information available

Autoignition temperature

No information available

Decomposition temperature

available

Kinematic viscosity

No information available

Dynamic viscosity

available

No information available

No information available
 No information available
 No information available
 No information available
 No information available
 No information available
 No information available
 No information available
 No information available
 No information available

Explosive properties	Not an explosive
Oxidizing properties	Not applicable
<u>9.2. Other information</u>	
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

10.3. Possibility of hazardous reactions

Possibility of Hazardous Reactions

None under normal processing.

10.4. Conditions to avoid None

known.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal use conditions.

Section 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Acute toxicity****Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation No data available.**Eye contact** No data available.**Skin contact** No data available.**Ingestion** No data available.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 9,552.00**ATEmix (dermal)** 55,295.00**Unknown acute toxicity**

94.7998352 % of the mixture consists of ingredient(s) of unknown toxicity.

76.3818352 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

77.8818352 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

93.1748352 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

94.7998352 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

90.2748352 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Proprietary Acrylic Ester Derivative	= 4890 mg/kg (Rat)	> 5 g/kg (Rabbit)	
Diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide	>5000 mg/kg	>2000 mg/kg	
Multifunctional Polyester Acrylate	= 5190 µL/kg (Rat)	= 5000 mg/kg (Rabbit)	
Black Pigment	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	
2,4-diethyl-9H-thioxanthen-9-one		2.000mg/kg	
2-phenoxyethyl acrylate	= 4660 µL/kg (Rat)	= 2540 µL/kg (Rabbit)	
1,6-Hexanediol diacrylate	= 5 g/kg (Rat)	= 3600 µL/kg (Rabbit)	
Oxybis(methyl-2,1-ethanediyl	= 4600 mg/kg (Rat)	> 2 g/kg (Rabbit)	
diacrylate			

Skin corrosion/irritation No information available.**Serious eye damage/eye irritation** No information available.**Sensitization** No information available.**Germ cell mutagenicity** No information available.**Carcinogenicity** No information available.**Reproductive toxicity** No information available.**STOT - single exposure** No information available.

STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Unknown aquatic toxicity 77.57774 % of the mixture consists of component(s) of unknown hazards to the aquatic environment
77.57774 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Proprietary Acrylic Ester Deivative	72 hours: 4.2 mg/l, Algae	-	-
Black Pigment	10000 mg/l / 3 d scenedesmus subspicatus	1000 mg/l / 96 h Brachydanio rerio	5600: 24 h Daphnia magna mg/L EC50

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential No

information available.

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment No

information available.

12.6. Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Improper disposal or reuse of this container may be dangerous and illegal.

Section 14: TRANSPORT INFORMATION

IMDG

14.1 UN/ID no	UN3082
14.2 Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
14.3 Hazard Class	9
14.4 Packing Group	III
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Isobornyl acrylate monomer, diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide), 9, III, Marine Pollutant
14.5 Marine pollutant	Not applicable
14.6 Special Provisions	274, 335
EmS-No	F-A, S-F

14.7 Transport in bulk according to No information available
Annex II of MARPOL 73/78 and the
IBC Code
RID

14.1 UN/ID no	UN3082
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	9
14.4 Packing Group	III
Description	&UN3082, & (<TNR00012>), 9, III
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None
Classification code	M6

ADR

14.1 UN/ID no	UN3082
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	9
Labels	9
14.4 Packing Group	III
Description	&UN3082, & (<TNA00012>), 9, III, (E)
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	274, 335, 601, 375
Classification code	M6
Tunnel restriction code	(E)

IATA

14.1 UN/ID no	UN3082
14.2 Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
14.3 Hazard Class	9
14.4 Packing Group	III
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Isobornyl acrylate monomer, diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide), 9, III
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	A97, A158, A197
ERG Code	9L

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

France**Occupational Illnesses (R-463-3, France)**

Chemical Name	French RG number	Title
Black Pigment	RG 16, RG 16bis	-

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

International Inventories15.2. Chemical safety assessment

No information available

Section 16: OTHER INFORMATION**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of R-phrases referred to under sections 2 and 3**

No information available

Full text of H-Statements referred to under section 3

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H317 - May cause an allergic skin reaction

H412 - Harmful to aquatic life with long lasting effects

H413 - May cause long lasting harmful effects to aquatic life

H318 - Causes serious eye damage

H411 - Toxic to aquatic life with long lasting effects

H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H225 - Highly flammable liquid and vapor

H361 - Suspected of damaging fertility or the unborn child if inhaled

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H332 - Harmful if inhaled

H314 - Causes severe skin burns and eye damage

H226 - Flammable liquid and vapor

Legend SVHC: Substances of Very High Concern for

Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA

TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

Ceiling

Maximum limit value

*

Skin designation

Issue Date 22-May-2018

Revision Date 22-May-2018

Revision Note Not applicable.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

End of Safety Data Sheet