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 03-Jun-2015 Revision Date 03-Jun-2015 Version 1

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

1.1. Product identifier

Product Name Amethyst A50-UV-MPX Magenta

Contains N-Vinylcaprolactam, diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-phosphine oxide, Oxybis(methyl-2,1-ethanediyl diacylate, Propoxylated neopentyl glycol

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 During normal opening times: +27 21 763 6990

24 Hours: +27 83 326 0774

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

11094141011 (20) 110 121212000	
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitization	Category 1B - (H317)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Specific target organ toxicity (repeated exposure)	Category 1 - (H372)
Chronic aquatic toxicity	Category 2 - (H411)

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

Full text of R-phrases: see section 16

Hazard symbols

Xn - Harmful

N - Dangerous for the environment

R-code(s)

Xn;R48/20 - Xn;R22 - Xi;R36/37/38 - R43 - N;R51/53

2.2. Label elements

Product identifier

Contains N-Vinylcaprolactam, diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-phosphine oxide, Oxybis(methyl-2,1-ethanediyl diacylate, Propoxylated neopentyl glycol

DEACH



Signal word Danger

Hazard statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H372 - Causes damage to organs through prolonged or repeated exposure

H411 - Toxic to aquatic life with long lasting effects

EUH210 - Safety data sheet available on request

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

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

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

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

P321 Specific treatment(see on this label

P405 - Store locked up

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

Chamical Name EC No. CAS No. Weight 9/ Classification Classification

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC No	CAS No	Weight-%	according to Directive 67/548/EEC or 1999/45/EC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Isobornyl acrylate monomer	227-561-6	5888-33-5	<50	Xi; R36/37/38 N; R51-53	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411)	No data available
N-Vinylcaprolactam	218-787-6	2235-00-9	<20	Xn; R22-48/20 Xi; R36/37 R43	STOT RE 1 (H372) Eye Irrit. 2 (H319) Skin Sens. 1B (H317) Acute Tox. 4 (H302)	No data available
Multifunctional Amine Acrylate	-	XX-XX-X	<10	Xi; R36/38	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	No data available
diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide	278-355-8	75980-60-8	<5	Repr.Cat.3; R62 R43 N;51/53	Skin Sens. 1 (H317) Repr. 2 (H361) Aquatic Chronic 2 (H411)	No data available
phenylbis(2,4,6-trimeth ylbenzoyl)-phosphine oxide	423-340-5	162881-26-7	<5	R43 R53	Skin Sens. 1 (H317) Aquatic Chronic 4 (H413)	No data available
Propoxylated	-	84170-74-1	<10	Xi; R36/37/38	Skin Irrit. 2 (H315)	No data available

neopentyl glycol					Eye Irrit. 2 (H319) Skin Sens. 1 (H317) STOT SE 3 (H335)	
Oxybis(methyl-2,1-eth anediyl diacylate	260-754-3	57472-68-1	<10	Xi;R41,38 R43	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317)	No data available
1,6-Hexanediol diacrylate	235-921-9	13048-33-4	<10	Xi; R36/38 R43	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Aquatic Chronic 3 (H412)	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

General advice Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

Inhalation Immediate medical attention is not required. If symptoms persist, call a physician. Artificial

respiration and/or oxygen may be necessary. Move to fresh air in case of accidental inhalation of vapors. If breathing is irregular or stopped, administer artificial respiration.

Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Skin contact Wash off immediately with plenty of water. If skin irritation persists, call a physician.

Immediate medical attention is not required. Wash off immediately with plenty of water for at least 15 minutes. Wash contaminated clothing before reuse. Consult a physician if

necessary.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Ingestion Never give anything by mouth to an unconscious person. Immediate medical attention is not

required. Clean mouth with water and drink afterwards plenty of water. Call a physician. If

symptoms persist, call a physician.

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

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Dike fire-control water for later disposal. Dry chemical, CO2, water spray or regular foam. Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

Unsuitable extinguishing media

Do not scatter spilled material with high pressure water streams

5.2. Special hazards arising from the substance or mixture

Some may be transported hot Some may burn but none ignite readily Those substances designated with a "P" may polymerize explosively when heated or involved in a fire

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

Avoid contact with eyes and skin. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes or clothing. Do not touch or walk through spilled material. Stop leak if you can do it without risk.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Prevent dust cloud.

Methods for cleaning up Dam up. Pick up and transfer to properly labeled containers. After cleaning, flush away

traces with water. Prevent product from entering drains. Clean contaminated surface thoroughly. Avoid creating dust. Take up mechanically, placing in appropriate containers for disposal. Cover powder spill with plastic sheet or tarp to minimize spreading and keep

powder dry. Use personal protective equipment as required.

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. Use with local exhaust ventilation. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

General Hygiene Considerations

Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep in properly labeled containers. Keep container tightly closed. 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

Derived No Effect Level (DNEL)No information available.

Predicted No Effect Concentration

No information available.

(PNEC)

8.2. Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Face protection shield.

Skin and body protection Suitable protective clothing. Apron. Gloves made of plastic or rubber. 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

AppearanceLiquidOdorCharacteristic

ColorMagentaOdor thresholdNo information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH No information available

Melting point / freezing point

Boiling point / boiling range > 200 °C / 392 °F

Flash point >100 °C / °F

Evaporation rate No information available Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit:No information availableLower flammability limit:No information available

Vapor pressureNo information availableVapor densityNo information available

Relative density

Water solubility Immiscible in water

Solubility(ies) No information available

Partition coefficient
Autoignition temperature

Decomposition temperature

Kinematic viscosity

No information available
No information available

Dynamic viscosity

Explosive properties

Oxidizing properties

Not an explosive
Not applicable

9.2. Other information

Softening point
Molecular weight
VOC Content (%)
Density
No information available

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.

InhalationNo data available.Eye contactNo data available.Skin contactNo data available.IngestionNo data available.

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

ATEmix (oral) 2,426.00 mg/kg
ATEmix (dermal) 87,788.00 mg/kg

Unknown acute toxicity

60.884% of the mixture consists of ingredient(s) of unknown toxicity.

56.15 % of the mixture consists of ingredient(s) of unknown acute oral toxicity. 56.15 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

60.884 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas). 60.884 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

57.984 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isobornyl acrylate monomer	= 4890 mg/kg (Rat)	> 5 g/kg (Rabbit)	
N-Vinylcaprolactam	1400 mg/kg	>2000 mg/kg	
diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide	>5000 mg/kg	>2000 mg/kg	
Oxybis(methyl-2,1-ethanediyl	= 4600 mg/kg (Rat)	> 2 g/kg (Rabbit)	

diacylate			
2-phenoxyethyl acrylate	= 4660 µL/kg (Rat)	= 2540 μL/kg (Rabbit)	
1,6-Hexanediol diacrylate	= 5 g/kg (Rat)	= 3600 μL/kg (Rabbit)	

Skin corrosion/irritationNo 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 exposureNo information available.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Unknown Aquatic Toxicity 11.044 % of the mixture consists of components(s) of unknown hazards to the aquatic environment 11.044 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
N-Vinylcaprolactam	>100 mg/l Scenedesmus	318 mg/l Brachydanio rerio	-
	subspicatus		

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,

diphenyl(2,4,6,-trimethylbenzoyl)phosphine oxide), 9, III, Marine Pollutant

14.5 Marine pollutant Not applicable

Environmental hazard Yes 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 Environmentally hazardous substances, solid, n.o.s.

14.3 Hazard Class 9 **14.4 Packing Group** III

Description UN3082, Environmentally hazardous substances, solid, n.o.s. (Isobornyl acrylate,

diphenyl(2,4,6,-trimethylbenzoyl)phosphine oxide), 9, III

14.5 Environmental hazardYes14.6 Special ProvisionsNoneClassification codeM6

<u>ADR</u>

14.1 UN/ID no UN3082

14.2 Proper shipping name Environmentally hazardous substances, solid, n.o.s.

 14.3 Hazard Class
 9

 Labels
 9

 14.4 Packing Group
 III

Description UN3082, Environmentally hazardous substances, solid, n.o.s. (Isobornyl acrylate,

diphenyl(2,4,6,-trimethylbenzoyl)phosphine oxide), 9, III, (E)

14.5 Environmental hazard Yes

14.6 Special Provisions 274, 335, 601, 375

Classification code M6
Tunnel restriction code (E)

<u>IATA</u>

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,

diphenyl(2,4,6,-trimethylbenzoyl)phosphine oxide), 9, III

14.5 Environmental hazard Yes

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

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 Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. 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

R43 - May cause sensitization by skin contact

R22 - Harmful if swallowed

R62 - Possible risk of impaired fertility

R53 - May cause long-term adverse effects in the aquatic environment

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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

R36/37 - Irritating to eyes and respiratory system

R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation

R36/38 - Irritating to eyes and skin

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

H372 - Causes damage to organs through prolonged or repeated exposure if inhaled

H302 - Harmful if swallowed

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

H411 - Toxic to aquatic life with long lasting effects

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

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 03-Jun-2015

Revision Date 03-Jun-2015

Revision Note Not applicable.

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

End of Safety Data Sheet