

Safety Data Sheet

Issue date 22-Jul-2016 (DD-MMM-YYYY)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product name I N K J E T I N K J U T B L A C K

Product Name (English) I N K J E T I N K J U T B L A C K

Recommended Use Ink jet ink (UV curing)

H- Product code 018793

E- Product code S6082247-LWCE02MN-LWCE02MN

Company Name **Importer / Supplier**

Universal Phaeton Digital Equipment Ltd. -
Huiyang Economic Development Zone,
Huizhou City, GuangDong, China
+86 752 3737218

Emergency telephone -

Email address -

SECTION 2: Hazards identification

GHS - Classification

Acute toxicity - Oral	Category 4
skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1B
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

Label Elements

Pictogram



Signal Word

DANGER

hazard statements

H302 - Harmful if swallowed

H315 - Causes skin irritation

H318 - Causes serious eye damage

H317 - May cause an allergic skin reaction

H361 - Suspected of damaging fertility or the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves
 Do not breathe dust/fume/gas/mist/vapors/spray
 Avoid release to the environment

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 Specific treatment

skin

IF ON SKIN: Wash with plenty of soap and water
 Take off contaminated clothing and wash before reuse
 If skin irritation or rash occurs: Get medical advice/attention

eye

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor/physician

INGESTION

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth

Spill

Collect spillage

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

SECTION 3: Composition/information on ingredients

Single Substance or Mixture mixture

Recommended Use Ink jet ink (UV curing)

Ingredients contributing to the classification of the mixture, etc.

Chemical name	CAS No	weight-%
Morpholine, 4-(1-oxo-2-propenyl)-	5117-12-4	10-20
2-Propenoic acid, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo-	5888-33-5	10-20
2-Propenoic acid, 2-(2-ethoxyethoxy)ethyl ester	7328-17-8	10-20
2H-Azepin-2-one, 1-ethenylhexahydro-	2235-00-9	10-20
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	75980-60-8	5-10
2-Propenoic acid, phenylmethyl ester	2495-35-4	5-10
Carbon black	1333-86-4	1-5
Diocetyl maleate	2915-53-9	1-5
Poly[oxy(methyl-1,2-ethanediyl)], alpha,alpha',alpha"-1,2,3-propanetriyltris[omega-(1-oxo-2-propenyl)oxy]-	52408-84-1	< 1
1,6-Hexanediol diacrylate	13048-33-4	< 1

SECTION 4: First aid measures

General advice	Immediate medical attention is required If symptoms persist, call a physician Do not breathe dust/fume/gas/mist/vapors/spray Do not get in eyes, on skin, or on clothing May produce an allergic reaction
inhalation	Remove to fresh air Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation Seek immediate medical attention/advice If breathing is irregular or stopped, administer artificial respiration Artificial respiration and/or oxygen may be necessary Call a physician Move to fresh air in case of accidental inhalation of vapors If symptoms persist, call a physician IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing IF INHALED: Call a POISON CENTER or doctor if you feel unwell
Skin contact	Immediate medical attention is required Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes Wash contaminated clothing before reuse Wash off immediately with soap and plenty of water If skin irritation persists, call a physician Get medical attention if irritation develops and persists
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes Keep eye wide open while rinsing Call a physician immediately Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes If symptoms persist, call a physician If eye irritation persists: Get medical advice/attention
INGESTION	Do NOT induce vomiting Clean mouth with water and drink afterwards plenty of water Never give anything by mouth to an unconscious person Call a physician or poison control center immediately Call a physician Potential for aspiration if swallowed Get medical attention Clean mouth with water
Self-protection of the first aider	Use personal protection recommended in Section 8 Avoid contact with skin, eyes or clothing
Note to physicians	May cause sensitization of susceptible persons Treat symptomatically

SECTION 5: Fire fighting measures

Suitable extinguishing media	CO2, dry chemical, dry sand, alcohol-resistant foam, mist of alkali salts water Move containers from fire area if you can do it without risk Use extinguishing measures that are appropriate to local circumstances and the surrounding environment Remove combustible materials from their surroundings immediately
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Specific hazards arising from the chemical	In the event of fire and/or explosion do not breathe fumes May cause sensitization by inhalation and skin contact Thermal decomposition can lead to release of irritating and toxic gases and vapors The product causes irritation of eyes, skin and mucous membranes
Special protective equipment for fire-fighters	Wear self contained breathing apparatus for fire fighting if necessary Use personal protective equipment as required In the event of fire and/or explosion do not breathe fumes Special protective equipment for fire-fighters
Flammable properties	May re-ignite after fire is extinguished Flammable/combustible material
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire
Special Extinguishing Media	Cool container with water spray

SECTION 6: Accidental release measures

Environmental Precautions	Prevent further leakage or spillage if safe to do so Prevent product from entering drains Do not flush into surface water or sanitary sewer system See Section 12 for additional Ecological Information Dispose of contents/container to an approved waste disposal plant Avoid release to the environment Collect spillage
Methods for cleaning up	Cover liquid spill with sand, earth or other non-combustible absorbent material Cover powder spill with plastic sheet or tarp to minimize spreading Sweep up and shovel into suitable containers for disposal Soak up with inert absorbent material Dam up Pick up and transfer to properly labeled containers Use only non-sparking tools
Personal precautions	Use personal protective equipment as required Keep people away from and upwind of spill/leak Evacuate personnel to safe areas Stay upwind ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) Avoid contact with skin, eyes and inhalation of vapors In the case of vapor formation use a respirator with filter model In case of fire: Stop leak if safe to do so Do not touch damaged containers or spilled material unless wearing appropriate protective clothing Ensure adequate ventilation, especially in confined areas Take precautionary measures against static discharges
OTHER INFORMATION	Ventilate the area
Methods for Containment	Prevent further leakage or spillage if safe to do so Cover powder spill with plastic sheet or tarp to minimize spreading Dike far ahead of liquid spill for later disposal

SECTION 7: Handling and storage

Advice on safe handling

- Avoid contact with skin, eyes or clothing
- Wash contaminated clothing before reuse
- Do not eat, drink or smoke when using this product
- Use personal protection recommended in Section 8
- Do not breathe dust/fume/gas/mist/vapors/spray
- Use with local exhaust ventilation
- Take precautionary measures against static discharges
- Use only in well-ventilated areas
- Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
- Wash hands thoroughly and gargle after handling
- Burn or dispose of the wiping cloths used to clean up the product at once

General hygiene considerations

- When using do not eat, drink or smoke
- Regular cleaning of equipment, work area and clothing is recommended
- Avoid contact with skin, eyes or clothing
- Wash hands thoroughly after handling
- Keep away from food, drink and animal feeding stuffs

Storage Conditions

- Keep containers tightly closed in a dry, cool and well-ventilated place
- Keep out of the reach of children
- Keep in properly labeled containers
- Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity)
- Use spark-proof tools and explosion-proof equipment
- Incompatible with oxidizing agents
- The product shall be stored in the original containers/vessels
- Polymerization is caused by ultra violet rays or heat. Store in a cool, dark and well-ventilated place. Containers/vessels should be tightly closed

SECTION 8: Exposure controls/personal protection

Exposure Limits No information available

Chemical name	China	Japan	ACGIH TLV	OSHA PEL
Carbon black	TWA: 4 mg/m ³ total dust STEL: 8 mg/m ³ total dust	4 mg/m ³ (Class 2 Dust,total dust) 1 mg/m ³ (Class 2 Dust,respirable dust)	TWA: 3 mg/m ³ inhalable fraction	TWA: 3.5 mg/m ³

Engineering controls

- Ensure adequate ventilation, especially in confined areas
- Showers
- Eyewash stations
- Ventilation systems

Personal protective equipment (PPE)

Respiratory protection

- In case of insufficient ventilation, wear suitable respiratory equipment
- Respirator cartridge should be exchanged at regular intervals or at proper time according to breakthrough time

Hand protection

- Wear protective gloves

Eye/face Protection

- Tight sealing safety goggles
- Face protection shield
- Wear safety glasses with side shields (or goggles)

Skin and Body Protection

- Suitable protective clothing
- Gloves made of plastic or rubber
- Wear suitable protective clothing
- Apron
- Protective shoes or boots

SECTION 9: Physical and chemical properties

Physical state liquid
color colored
ODR characteristic odor
odor threshold no data available

<u>Property</u>	<u>Values</u>	<u>Remarks</u> • <u>Flash point measuring method</u>
pH	Not applicable	
Melting point/freezing point	no data available	
Boiling point/boiling range	no data available	No information available
Flash Point	≥94°C	Seta Closed Cup
Evaporation Rate	no data available	No information available
Combustibility	no data available	
explosive limits		
Explosive upper limit	no data available	
Explosive lower limit	no data available	
vapor pressure	no data available	No information available
Vapor density	no data available	No information available
Specific gravity	1.00-1.10	
solubility(ies)		
Water solubility	Immiscible in water	
Organic Solvent Solubility	soluble in organic solvents	
Partition coefficient	no data available	No information available
Autoignition temperature	no data available	No information available
decomposition temperature	no data available	No information available

Chemical name	Boiling point °C	density	Vapor pressure	Vapor density	Flash Point	Autoignition temperature
2-Propenoic acid, phenylmethyl ester	228 °C 1013.25 hPa	1.0573 g/cm3 at 20 °C	-	-	-	-
Carbon black	-	1.86 g/cm3	-	-	-	-
1,6-Hexanediol diacrylate	-	-	0.0005 mmHg at 21 °C	-	132 °C closed cup	-

SECTION 10: Stability and reactivity

stability Stable under normal conditions

Explosion data

Sensitivity to Mechanical Impact May be ignited by heat, sparks or flames
Sensitivity to Static Discharge May be ignited by heat, sparks or flames

Possibility of hazardous reactions None under normal processing

Conditions to Avoid Take precautionary measures against static discharges
 Extremes of temperature and direct sunlight
 Heat

Incompatible Materials Heat
 Strong acids
 OXIDIZERS
 alkali
 Light
 peroxides
 radical initiators

Hazardous decomposition products May emit toxic fumes under fire conditions

hazardous polymerization None under normal processing

stability Stable under normal conditions
Polymerization can occur
Heating may cause an explosion

SECTION 11: Toxicological information

Repeated or prolonged contact may cause allergic reactions in very susceptible persons
May cause sensitization by skin contact
May cause sensitization by inhalation and skin contact

Acute Toxicity

inhalation Reference to other sections; 4
Eye Contact Reference to other sections; 4
Skin contact Reference to other sections; 4
INGESTION Reference to other sections; 4

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

Chemical name	IARC
Carbon black	Group 2B

IARC Note:

Group 1: Carcinogenic to humans, Group 2A: Probably carcinogenic to humans, Group 2B: Possibly carcinogenic to humans, Group 3: Not classifiable as to carcinogenicity in humans

Reproductive Toxicity No information available

STOT - single exposure No information available

STOT - repeated exposure No information available

Aspiration Hazard No information available

Numerical measures of toxicity

19.7% of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral) 1,287.00

Chemical name	Oral LD50	dermal LD50	Inhalation LC50	Classification according to Regulation (EC) No. 1272/2008 [CLP] ANNEX VI Table3.1 / Other	Japan GHS Classification / Other

Morpholine, 4-(1-oxo-2-propenyl)-	-	-	-	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Skin Sens. 1 (H317) STOT RE 2 (H373)	-
2-Propenoic acid, 2-(2-ethoxyethoxy)ethyl ester	-	-	-	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1 (H317)	Skin Irrit. 2 Eye Irrit. 2A Skin Sens. 1
2-Propenoic acid, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo-	-	-	-	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1B (H317) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	Skin Irrit. 2 Eye Irrit. 2 Skin Sens. 1B STOT SE 3 Aquatic Acute 1 Aquatic Chronic 1
2H-Azepin-2-one, 1-ethenylhexahydro-	-	-	-	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) Skin Sens. 1B (H317) STOT RE 1 (H372)	Acute Tox. Oral 4 Eye Irrit. 2 Skin Sens. 1B STOT RE 1
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	-	-	-	Repr. 2 (H361f) Repr. 2 (H361)	-
2-Propenoic acid, phenylmethyl ester	-	-	-	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1 (H317)	Skin Irrit. 2 Eye Irrit. 2A Skin Sens. 1
Carbon black	-	-	-	STOT RE 1 (H372)	STOT RE 1 Self-heat. 1 Self-heat. 2
Diocetyl maleate	-	-	-	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) STOT SE 3 (H335)	Skin Irrit. 2 Eye Irrit. 2A STOT SE 3
Poly[oxy(methyl-1,2-ethanediyl)], alpha,alpha',alpha"-1,2,3-propanetriyltris[omega-[(1-oxo-2-propenyl)oxy]-	-	-	-	Eye Irrit. 2A (H319) Skin Sens. 1 (H317)	Eye Irrit. 2A Skin Sens. 1
1,6-Hexanediol diacrylate	-	-	-	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	Aquatic Chronic 1 Aquatic Acute 1 Skin Sens. 1

GHS/CLP Classification Note:

Acute Tox. Der. :Acute toxicity - Dermal, Acute Tox. Inh. (D/M) :Acute toxicity - Inhalation - Dusts and Mists, Acute Tox. Inh. (Gas) :Acute toxicity - Inhalation - Gases, Acute Tox. Inh. (Vap) :Acute toxicity - Inhalation - Vapours, Acute Tox. Oral :Acute toxicity - Oral, Aquatic Acute :Acute Hazardous to the aquatic environment, Aquatic Chronic :Chronic Hazardous to the aquatic environment, Asp. Tox. :Aspiration hazard, Carc. :Carcinogenicity, Expl. :Explosives, Eye Dam. :Serious eye damage, Eye Irrit. :Eye irritation, Flam. Gas :Flammable gases (including chemically unstable gases), Flam. Liq. :Flammable liquids, Flam. Solid :Flammable solids, Lact. :Effects on or via lactation, Met. Corr. :Corrosive to metals, Muta. :Germ cell mutagenicity, Org. Perox. :Organic peroxides, Ox. Gas :Oxidizing gases, Ox. Liq. :Oxidizing liquids, Ox. Sol. :Oxidizing solids, Press. Gas :Gases under pressure, Pyr. Liq. :Pyrophoric liquids, Pyr. Sol. :Pyrophoric solids, Repr. :Reproductive toxicity, Resp. Sens. :Respiratory sensitization, Self-heat. :Self-heating substances and mixtures, Self-react. :Self-reactive substances and mixtures, Skin Corr. :Skin corrosion, Skin Irrit. :Skin irritation, Skin Sens. :Skin sensitization, STOT RE :Specific target organ toxicity – Repeated exposure, STOT SE :Specific target organ toxicity – Single exposure, Water-react. :Substances and mixtures which, in contact with water emit flammable gases

SECTION 12: Ecological information

ecotoxicity

85.7 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability No information available

Bioaccumulation No information available

Mobility No information available

Other adverse effects No information available

SECTION 13: Disposal considerations

Waste from Residues / Unused Products Should not be released into the environment. 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.

OTHER INFORMATION Store in a tightly sealed drum to prevent the spillage of the content

SECTION 14: Transport information

Containers/vessels must be leakage-free. Loading must be done to prevent containers from falling, dropping down and being damaged
 Take necessary steps to prevent collapse
 Use opaque containers/vessels for storage and transport

UN number UN3082
Packing group III
ERG Code 171
Proper shipping name Environmentally hazardous substance, liquid, n.o.s.

IMDG
UN number UN3082
Proper shipping name Environmentally hazardous substance, liquid, n.o.s.
Hazard Class 9
Packing group III
EmS-No F-A, S-F

IATA
UN number UN3082
Proper shipping name Environmentally hazardous substance, liquid, n.o.s.
Hazard Class 9
Packing group III
ERG Code 9L

SECTION 15: Regulatory information

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

Prevention and Control of Occupational Diseases Present

Regulations on Safe Management of Hazardous chemicals Not applicable

Regulation on the Administration of Precursor Chemicals Not applicable

Harmonized Commodity Description and Coding System
The Law of the People's Republic of China on Import and Export Commodity Inspection Not applicable

Regulations for Environmental Management on the Import and Export of Toxic Chemicals Not applicable

Road transport management regulations for dangerous goods Not applicable

SECTION 16: Other information

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Key literature references and sources for data LOLI Database (ChemADVISOR, Inc.)

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet