MSDS Safety Data Sheet

Issue date 18-Non-2015 (DD-MMM-YYYY) **Revision date** 09-Mar-2016 (DD-MMM-YYYY)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product name INKJET INK JUT-03 WHITE

Product Name (English) INKJET INK JUT-03 WHITE

Recommended Use Ink jet ink (UV curing)

H- Product code 042220

E- Product code S6082247-LRCB0IIS-LRCB0IIS

Company Name
Universal Phaeton Ltd.
Huiyang,Huizhou City
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SECTION 2: Hazards identification

GHS – Classification

Acute toxicity - Oral	Category 5
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

H303 - May be 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
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Do not breathe dust/fume/gas/mist/vapors/spray
Do not eat, drink or smoke when using this product
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

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-%
2-Propenoic acid, phenylmethyl ester	2495-35-4	20-30
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	75980-60-8	10-20
Titanium dioxide	13463-67-7	10-20
2H-Azepin-2-one, 1-ethenylhexahydro-	2235-00-9	10-20
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	5-10
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

CO_2, 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

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
Titanium dioxide	TWA: 8 mg/m^3 total dust STEL: 16 mg/m^3 total dust	0.3 mg/m^3 (Provisional)	TWA: 10 mg/m^3	TWA: 15 mg/m^3 total dust

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

Property	Values	Remarks • Flash point measuring method
pH	Not applicable	
Melting point/freezing point	no data available	
Boiling point/boiling range	no data available	No information available
Flash Point	≧94℃	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	1.10-1.20	
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	-	-	-	-
Titanium dioxide	2500 - 3000 °C	3.9 - 4.1 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
Titanium dioxide	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
8.3% 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) 2,418.00

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
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
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	-	-	-	Repr. 2 (H361f) Repr. 2 (H361)	-
Titanium dioxide	> 10000 mg/kg (Rat)	-	-	Eye Irrit. 2B (H320)	Eye Irrit. 2B
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, 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)	-
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
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
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

90.3% of the mixture consists of components(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