

Safety Data Sheet

Issuing Date 20-July-2018 Revision Date - Version 1

Section 1: PRODUCT AND COMPANY INFORMATION

Product Code(s) IKUU000053

Product Name UV LED Magenta Inkjet Ink

Synonyms None

Recommended Use For Industry Use Only by Qualified Personnel

Supplied By

Innovative Digital Systems 2000 Innovation Drive Indian Trail, NC 28079 PH: +1(704)628-7679 www.ids-digital.com www.digitalprintsupplies.com

Section 2: HAZARD IDENTIFICATION

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910/1200)

Acute toxicity – Oral	Category 5	
Acute toxicity – Dermal	Category 5	
Skin corrosion/irritation	Category 2	
Eye damage/eye irritation	Category 2A	
Skin sensitization	Category 1	
Reproductive toxicity	Category 2	
Specific target organ toxicity (single exposure)	Category 3	
Specific target organ toxicity (repeated exposure)	Category 2	
Chronic aquatic toxicity	Category 2	

GHS Label Elements



Signal Word

Hazard Statements

H303 - May be harmful if swallowed.

H313 - May be harmful in contact with skin.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

H361 - Suspected of damaging fertility or the unborn child.

+373 - May cause damage to respiratory tract and liver through prolonged or repeated exposure.

WARNING

H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statements - Prevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 Wash face, hands and any exposed skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workspace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ protective clothing/ eye protection/face protection.
- P281 Use personal protective equipment as required.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

Specific treatment (see supplemental first aid instructions on this label)

Collect spillage.

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.

IF IN EYES:

Rinse cautiously with water for several minutes.

Remove contact lenses if present and easy to do so. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Precautionary Statements - Storage

P403 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

Precautionary Statements - Disposal

P501 - Dispose of contents/container to an approved waste disposal plant.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

This Material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Chemical name	CAS No.	Weight %	Classification (Reg. 1272/2008)
Acrylic Monomer Blend	Proprietary	30-50*	Skin Irrit. 2 (H315), Eye Irrit. 2 (H319),
			Skin Sens. 1 (H317)
Isobornyl acrylate	5888-33-5	20-40*	Skin Irrit. 2 (H315), Eye Irrit. 2A (H319),
			STOT SE 3 (H335), Aquatic Chronic 3 (H412)
Lactam	Proprietary	1-10*	Eye Irrit. 2A (H319), Skin Sens. 1 (H317),
			Acute Tox. 4 (H302, H312), STOT RE 1 (H372)
1,6-Hexandioldiacrylate	13048-33-4	1-10*	Skin Irrit. 2 (H315), Eye Irrit. 2 (H319),
			Skin Sens. 1 (H317), Aquatic Chronic 3 (H412)
Diphenyl(2,4,6-	75980-60-8	1-10*	Repr. 2 (H361), Aquatic Chronic 2 (H411),
trimethylbenzoyl)phosphine oxide			Skin Sens. 1B (H317)
Photoinitiator Blend	Proprietary	1-10*	Aquatic Chronic 4 (H413), Skin Sens. 1 (H317)
Additives	Proprietary	1 -10*	Aquatic Chronic 2 (H411), Skin Sens. 1 (H317)

Remaining ingredients are not considered hazardous in accordance with the Globally Harmonized System (GHS)

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: FIRST AID MEASURES

General Advice In case of serious or persistent conditions, call a doctor or emergency medical care.

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 flushing. If symptoms

persist, call a physician.

Skin Contact Immediately wash skin with plenty of water. Remove contaminated clothing. Get medical

attention if symptoms occur. Wash clothing before reuse.

Ingestion Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an

unconscious person. Clean mouth with water and afterwards drink plenty of water. Consult a

physician.

Inhalation Remove to fresh air. Avoid direct contact with skin. Immediate medical attention is required. If

not breathing, give artificial respiration. Artificial respiration and/or oxygen may be necessary.

If symptoms persist, call a physician.

Notes to Physician Eye Contact - Emergency Medical Treatment Procedures:

Some photoinitiators cure in the near UV and visible light range.

Keep overhead lighting OFF as a precaution. Flush eyes for an additional 15-30 minutes prior to examination under light. DO NOT use UV light with fluorescent stain to examine injured eye without copious irrigation of the eye. May cause sensitization of susceptible persons. Use

of epinephrine may be indicated. Treat symptomatically.

Self-Protection of the First Aider Use personal protective equipment as required. Avoid contact with skin, eyes and clothing.

Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

Section 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use Carbon dioxide (CO₂), Dry chemical, or foam. Cool containers with flooding quantities of

water until well after fire is out.

Firefighters

Special Protective Equipment for Wear self-contained breathing apparatus and full protective gear for firefighting if necessary.

Section 6: ACCIDENTAL RELEASE MEASURES

Environmental Precautions Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate

ground water system. Prevent the material from entering drains or water courses. Do not

flush into surface water or sanitary sewer system.

Personal Precautions Evacuate personnel to safe areas. Ensure adequate ventilation, wear protective

gloves/clothing and eye/face protection.

Methods for Cleaning Up Take up with sand or other non-combustible absorbent material and place into containers for

later disposal. Use personal protective equipment as required.

Section 7: HANDLING AND STORAGE

Handling Use personal protective equipment as required. Avoid contact with skin, eyes and clothing.

Do not eat, drink or smoke when using this product. Do not breathe

dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation. Protect from light.

Keep container tightly closed in a dry and well-ventilated place. Protect from light. Keep out of Storage

the reach of children. Keep in properly labeled containers.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures Ventilation systems. Where reasonably practicable this should be achieved by the use of

local exhaust ventilation and good general extraction.

Personal Protective Equipment

Respiratory Protection Provide adequate ventilation. Provide extract ventilation at the points where emissions occur.

Static electricity and formation of sparks must be prevented. Do not breathe vapors, mist or

gas.

Skin and Body Protection
Eye/Face Protection

Wear protective nitrile rubber gloves and impervious protective clothing.

Wear tight-fitting safety glasses with side-shields.

Environmental Exposure Controls Local authorities should be advised if significant spillages cannot be contained. Do not allow

into any sewer, on the ground or into any body of water. Prevent product from entering

drains.

Hygiene Measures When using do not eat, drink or smoke. Regular cleaning of equipment, work area and

clothing is recommended. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Discard gloves that show tears, pinholes,

or signs of wear. Keep away from food and drink.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical stateLiquidColorMagentaOdorAcrylic

<u>Property</u> <u>Values</u>

pH No information available
Melting point/range (°C) No information available
Boiling point/range (°C) No information available

Flash point > 100°C

No information available Flammability limit in air No information available **Autoignition temperature Decomposition temperature** No information available Vapor pressure No information available Vapor density No information available Specific gravity No information available **VOC** content No information available **Evaporation rate** No information available **Water Solubility** Practically insoluble

Viscosity at 25 °C 10-30 cP

Section 10: STABILITY AND REACTIVITY

Conditions to Avoid Protect from light. Polymerization occurs when exposed to white light, ultraviolet light or

heat. Heat, flames, and sparks.

Materials to Avoid Avoid Avoid contact with radical forming initiators, strong oxidizing agents, peroxides, strong acids

and bases or reactive metals.

Hazardous Decomposition

Products No decomposition if stored and applied as directed.

Hazardous Polymerization None under normal processing.

Section 11: TOXICOLOGY INFORMATION

Information on toxicological effects

Acute Toxicity

Information on Likely Routes of Exposure

Inhalation Irritating to respiratory tract. Avoid breathing vapors or mists.

Eye contact Irritating to eyes. Avoid contact with eyes.

Skin contact Irritating to skin and mucous membranes. May cause allergic skin reaction.

Ingestion Moderately Toxic. Do NOT taste or swallow.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause an allergic skin reaction.

Mutagenic effectsNo information available.Carcinogenic effectsNo information available.

Reproductive toxicity Possible risk of impaired fertility. May impair fertility. May cause harm to the unborn child.

STOT – repeat exposure Target organ effects

Respiratory tract, Liver.

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

0% 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) >2000 mg/kg ATEmix (dermal) >2000 mg/kg

ATEmix (inhalation-mist) No information available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acrylic Monomer Blend			
Isobornyl acrylate	4890 mg/kg (Rat)	>5000 mg/kg (Rabbit)	
Lactam	1114 mg/kg (Rat)	1700 mg/kg (Rabbit)	
1,6-Hexandioldiacrylate	>5000 mg/kg (Rat)	>3000 mg/kg (Rabbit)	
Diphenyl(2,4,6-			
trimethylbenzoyl)phosphine oxide	>5000 mg/kg (Rat)	>2000 mg/kg (Rat)	
Photoinitiator Blend	>2000 mg/kg (Rat)	>2000 mg/kg (Rat)	
Additives	5000 mg/kg (Rat)	>2000 mg/kg (Rat)	

Section 12: ECOLOGICAL INFORMATION

Acute aquatic toxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
			aquatic invertebrates
Acrylic Monomer Blend			
Isobornyl acrylate			EC ₅₀ , 48 hours: 1.1mg/L
Lactam	EC ₅₀ , 72 hours: >100mg/L	LC ₅₀ , 96 hours: 318mg/L	EC ₅₀ , 48 hours: >100mg/L
1,6-Hexandioldiacrylate	-	LC ₅₀ , 96 hours: 4.6-10mg/L	LC ₅₀ , 48 hours: 1-10mg/L
Diphenyl(2,4,6-			
trimethylbenzoyl)phosphine oxide	EC ₅₀ , 72 hours: >2.01mg/L	LC ₅₀ , 48 hours: 6.53mg/L	EC ₅₀ , 48 hours: 3.53mg/L
Photoinitiator Blend	-	-	NOEC, 21 days: 0.08mg/L
Additives	IC ₅₀ , 72 hours: 4.4mg/L	LC ₅₀ , 96 hours: 10mg/L	EC ₅₀ , 48 hours: 1.21mg/L

Persistence and degradability

No information available

Bioaccumulation/Accumulation No information available

Mobility No information available

Other Adverse Effects No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from Residues/Unused

Products

Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Dispose of in accordance with local and national regulations. All waste should be disposed of using a Registered Waste Carrier operating under the Environmental Protection Act (Duty of Care) Regulations 1992 (S.I. No. 2839).

Contaminated Packaging Disposal should be

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

application specific. Waste codes should be assigned by the user based on the application

for which the product was used.

Section 14: TRANSPORT INFORMATION

DOT Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

Section 15: REGULATORY INFORMATION

All components are on TSCA, EINECS/ELINCS, AICS, DSL, ENCS, IECSC, and KECL.

Section 16: OTHER INFORMATION

Supplied To Innovative Digital Systems

2000 Innovation Drive Indian Trail. NC 28079

Issuing Date 20-July-2018

Revision Date -

Revision Note No information available

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet