SAFETY DATA SHEET
TIJ-26S PRINTING INK

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	TIJ-26S PRINTING INK
Product number	TIJ-26S

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

Identified uses	Printing ink.

1.3. Details of the supplier of the safety data sheet

Supplier	Inkminic Logo Technology (Guangzhou) CO., LTD

1.4. Emergency telephone number

Emergency telephone	For emergencies call +86 020 32954560

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Eye Irrit. 2 - H319 Skin Sens. 1 - H317
Environmental hazards	Not Classified

2.2. Label elements

Hazard pictograms

Signal word	Warning
Hazard statements	H319 Causes serious eye irritation. H317 May cause an allergic skin reaction.
Precautionary statements	P261 Avoid breathing vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P501 Dispose of contents/ container in accordance with national regulations.
Contains	2-methylisothiazol-3(2H)-one, 1,2-benzisothiazol-3(2H)-one

Supplementary precautionary statements	P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P302+P352 IF ON SKIN: Wash with plenty of water. 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 medical advice on this label).

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

1,2-Hexanediol			10-20%
CAS number: 6920-22-5	EC number: 230-029-6	REACH registration number: 01-2119987321-35-XXXX	

Classification
Eye Irrit. 2 - H319

1,2-benzisothiazol-3(2H)-one		<0.1%
CAS number: 2634-33-5	EC number: 220-120-9	
M factor (Acute) = 1		

Classification
Acute Tox. 4 - H302
Acute Tox. 2 - H330
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Aquatic Acute 1 - H400
Aquatic Chronic 2 - H411

2-methylisothiazol-3(2H)-one		<0.1%
CAS number: 2682-20-4	EC number: 220-239-6	
M factor (Acute) = 10	M factor (Chronic) = 1	

Classification
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 2 - H330
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1A - H317
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention. Show this Safety Data Sheet to the medical personnel.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Ingestion	IF SWALLOWED: Get medical attention. Rinse mouth thoroughly with water. Do not induce vomiting unless under the direction of medical personnel. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Skin contact	IF ON SKIN: Rinse immediately with plenty of water. Get medical attention if irritation persists after washing.
Eye contact	IF IN EYES: Rinse immediately with plenty of water. Get medical attention if irritation persists after washing.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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

General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause irritation.
Skin contact	Redness. Irritating to skin.
Eye contact	Irritating to eyes.

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

Notes for the doctor	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Carbon dioxide (CO2). Carbon monoxide (CO).

5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material.

6.2. Environmental precautions

Environmental precautions	Contain spillage with sand, earth or other suitable non-combustible material. Use appropriate containment to avoid environmental contamination.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Collect and dispose of spillage as indicated in Section 13.

6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Do not handle until all safety precautions have been read and understood. Wear protective clothing as described in Section 8 of this safety data sheet. Handle all packages and containers carefully to minimise spills. Do not handle broken packages without protective equipment. Keep container tightly sealed when not in use.
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Keep only in the original container.
Storage class	Chemical storage.

7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

1,2-Hexanediol (CAS: 6920-22-5)

DNEL	REACH dossier information. Workers - Inhalation; Long term systemic effects: 123 mg/m³ Workers - Dermal; Long term systemic effects: 17.5 mg/kg/day

Disodium 4-amino-3,6-bis[[4-[(2,4-diaminophenyl)azo]phenyl]azo]-5-hydroxynaphthalene-2,7-disulphonate (CAS: 6428-31-5)

DNEL	Workers - Inhalation; Long term systemic effects: 1.32 mg/m³ Workers - Dermal; Long term systemic effects: 0.373 mg/kg/day General population - Dermal; Long term systemic effects: 0.133 mg/kg/day General population - Oral; Long term systemic effects: 0.133 mg/kg/day
PNEC	Fresh water; 0.876 mg/l marine water; 0.088 mg/l STP; 1 mg/l Sediment (Freshwater); 0.746 mg/kg Sediment (Marinewater); 0.075 mg/kg Soil; 0.152 mg/kg

8.2. Exposure controls

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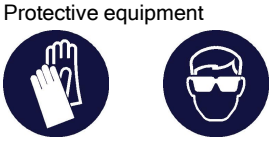
Protective equipment



Appropriate engineering controls	Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Ensure control measures are regularly inspected and maintained. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits.
Eye/face protection	Wear tight-fitting, chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374. Frequent changes are recommended. It is recommended that gloves are made of the following material: Nitrile rubber. Neoprene. Polyvinyl chloride (PVC). The selected gloves should have a breakthrough time of at least 8 hours. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. It should be noted that liquid may penetrate the gloves.
Other skin and body protection	Wear appropriate clothing to prevent skin contamination.
Hygiene measures	Provide eyewash station and safety shower. Wash contaminated clothing before reuse. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

Environmental exposure controls Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Black.
Odour	Mild.
Odour threshold	Not available.
pH	pH (concentrated solution): 9.1
Melting point	0°C Information given is applicable to the major ingredient.
Initial boiling point and range	100°C @ 760 mm Hg Information given is applicable to the major ingredient.
Flash point	Not relevant. The product is not flammable.
Evaporation rate	Not available.
Flammability (solid, gas)	Not relevant. The product is not flammable.
Upper/lower flammability or explosive limits	Not relevant. The product is not flammable.
Vapour pressure	2.34 kPa @ 20°C Information given is applicable to the major ingredient.
Vapour density	> 1
Relative density	1.011-1.021 @ 25°C
Solubility(ies)	Miscible with water.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.

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Viscosity	1.75-2.25 cP @ 25°C
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Molecular weight	Not applicable.
Volatile organic compound	This product contains a maximum VOC content of 10 %. This product contains a maximum VOC content of 0.10 kg/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	See Section 10.3 (Possibility of hazardous reactions) for further information.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Carbon dioxide (CO2). Carbon monoxide (CO).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD_{50})	Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD_{50})	Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation	Irritating to skin.
Animal data	Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation	Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation	Based on available data the classification criteria are not met.

Germ cell mutagenicity

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Genotoxicity - in vitro	Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met.

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	No specific symptoms known.
Skin contact	No specific symptoms known.
Eye contact	Irritating to eyes.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.

Toxicological information on ingredients.

1,2-Hexanediol

Acute toxicity - oral	
Notes (oral LD_{50})	REACH dossier information. LD_{50} > 5000 mg/kg, Oral, Rat
Acute toxicity - dermal	
Notes (dermal LD_{50})	REACH dossier information. LD_{50} > 2000 mg/kg, Dermal, Rat
Acute toxicity - inhalation	
Notes (inhalation LC_{50})	REACH dossier information. LC_{50} > 7015 mg/m³, Inhalation, Rat

1,2-benzisothiazol-3(2H)-one

Acute toxicity - oral	
ATE oral (mg/kg)	500.0
Acute toxicity - inhalation	
ATE inhalation (vapours mg/l)	0.5

2-methylisothiazol-3(2H)-one

Acute toxicity - oral	
ATE oral (mg/kg)	100.0
Acute toxicity - dermal	

ATE dermal (mg/kg)	300.0
Acute toxicity - inhalation	
ATE inhalation (dusts/mists mg/l)	0.05

SECTION 12: Ecological information

Ecotoxicity: Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity: Based on available data the classification criteria are not met.

Ecological information on ingredients.

1,2-Hexanediol

Acute aquatic toxicity	
Acute toxicity - fish	REACH dossier information. LC_{50}, 96 hours: > 1000 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	REACH dossier information. NOEC, 48 hours: > 110 mg/l, Daphnia magna
Acute toxicity - aquatic plants	REACH dossier information. NOEC, 72 hours: >= 100 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	REACH dossier information. NOEC, 3 hours: >= 1000 mg/l, Activated sludge

1,2-benzisothiazol-3(2H)-one

Acute aquatic toxicity	
$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Acute toxicity - microorganisms	EC_{50}, 3 hours: 13 mg/l, Activated sludge Supplier's information.

2-methylisothiazol-3(2H)-one

Acute aquatic toxicity	
$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	10
Acute toxicity - microorganisms	EC_{50}, 3 hours: 34.6 mg/l, Activated sludge Supplier's information.
Chronic aquatic toxicity	
M factor (Chronic)	1

12.2. Persistence and degradability

Persistence and degradability: The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

Ecological information on ingredients.

1,2-Hexanediol

Partition coefficient	log Pow: 0.58

2-methylisothiazol-3(2H)-one

Partition coefficient	log Pow: 0.119

12.4. Mobility in soil

Mobility	No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects	None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	The generation of waste should be minimised or avoided wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out.
Disposal methods	Dispose of waste product or used containers in accordance with local regulations Only store in correctly labelled containers.

SECTION 14: Transport information

General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ATE: Acute Toxicity Estimate. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. EC_{50}: 50% of maximal Effective Concentration. GHS: Globally Harmonized System. IARC: International Agency for Research on Cancer. IATA: International Air Transport Association. Kow: Octanol-water partition coefficient. LC_{50}: Lethal Concentration to 50 % of a test population. LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose). LOAEL: Lowest Observed Adverse Effect Level. NOAEL: No Observed Adverse Effect Level. PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. SVHC: Substances of Very High Concern. vPvB: Very Persistent and Very Bioaccumulative.
Key literature references and sources for data	Source: European Chemicals Agency, http://echa.europa.eu/ Supplier's information.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	31/07/2020
Revision	2
Supersedes date	01/10/2018
SDS number	1061
Hazard statements in full	H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H330 Fatal if inhaled. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.