Chemical Safety Technical Manual

Product Name: Zzx -- UV Ink Series

Compiled according to GB/T 16 4 8 3 and GB/T 17 5 1

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MSDS number: MSDS-20231101

Part 1 Chemicals and Enterprise Identification

Chinese name of chemical: UV ink

Chemical English name: UV ink

Enterprise Name ： HUIZHOUSHI ZHONGZHIXINGSECAI KEJI SICENCEAND TECHNOLOGYCO.LTD

Enterprise address ： HUIZHOUCITY HUI CHENG DISTRICT MAQUN LIAO LU TAI PARK INDUSTRIAL PARK,THE FIRST FLOOR OF BUILDING D

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Product recommendation and limited use: Ink is an important material used for packaging material printing. It expresses patterns and text on the substrate through printing. The ink includes the main and auxiliary components, which are evenly mixed and repeatedly rolled to form a viscous adhesive fluid.

Part 2 Hazard Overview

Warning word: Danger

Warning image:

Hazard category: Class III of hazardous materials

Invasion routes: inhalation, ingestion, and absorption through the skin.

Health hazards: Irritating to the skin and mucous membranes, can cause obvious irritation symptoms to the eyes and upper respiratory tract, as well as conjunctival and pharyngeal blood

Environmental hazards: serious harm to the environment, can cause pollution to the air, water environment, and water sources

Explosive hazard: This product is flammable and irritating.

Part 3 Composition/Composition Informatio

Chinese and English names of hazardous substance components	Concentration or concentration range (percentage of components)	Chemical substance registration number CAS - No
Acrylic resin oligomer	25%-30%	55818-57-0 71281-65-7 150-76-5
Active diluent	40%-50%	13048-33-4. 42987-66-5 2223-82-7 . 15625-89-5 94108-97- 1 .3524-68-3 5117- 12-4 . 2399-48-6 48145-04-6
pigment	10%-45%	5468-75-7 .77804-81 -0 6381-96-6 . 5281-04-9 5160-02- 1. 7585-41-3 147- 14-8 .1325-82-2 14302- 13-7. 13463-67-7 1333-86-4. 112926-00-8 9002-88-4 . 14807-96-
auxiliary	1-2%	9006-65-9
filler	4-8%	9548 1-62-2
Photoinitiator	5-10%	75980-60-8

Part 4 First Aid Measures

first aid

Inhalation: Quickly transfer the patient to a place with fresh air to maintain airway patency. In severe cases, seek medical treatment immediately

Contact with skin: Remove contaminated clothing, use a specialized cleaning cloth, thoroughly rinse the skin with soapy water, and do not use solvents.

Discomfort, seek medical attention immediately. Clean contaminated clothes before use.

Leakage into eyes: Rinse with plenty of water. If the pain persists, seek medical treatment immediately.

Not easy to swallow: Do not cause vomiting, rinse your mouth with water and seek medical treatment immediately.

Part 5 Fire Protection Measures

Fire extinguisher: foam, carbon dioxide, dry powder and other fire extinguishers shall be used for military purposes, and water shall not be used except for cooling and sealing containers.

Dangerous situation: When the temperature rises to a certain level or comes into contact with flames and sparks due to exposure, it may cause an explosion. burn

The burning process may produce harmful decomposition substances for human health.

Fire protection equipment: It is recommended to use self-contained oxygen breathing apparatus
Combustion products: carbon monoxide, carbon dioxide.

Extinguishing method: foggy water, foam, carbon dioxide, dry powder, sand. Vapour is heavier than air and tends to accumulate in lower areas. Closed area

Vapours within the domain can explode when exposed to fire. Vapour can spread to a distance, catch fire when encountering an ignition source, and cause reignition. Storage containers and their components may fly far in all directions. Use dry powder, alcohol resistant foam or carbon dioxide to extinguish the fire beyond the explosion-proof distance, and use foggy water to cool the container. Spray water to cool the container, and if possible, move the container from the fire to an open area. If the container in the fire has changed color or leaked. Evacuation is necessary immediately.

Emergency response: Quickly evacuate personnel from the contaminated area to a safe area and isolate them. Strictly restrict entry and exit. But cut off the source of fire. build

Emergency response personnel are advised to wear only positive pressure breathing machines and protective clothing. Cut off the source of leakage as much as possible. Prevent flow

Restricted spaces such as sewers and drainage ditches.

Minor leakage: Absorb with activated carbon or other inert materials. It can also be brushed with lotion made of non flammable dispersant, and the lotion is thin

After release, it is placed in the wastewater system for treatment.

Large amount of leakage: build enclosure or dig a pit to collect and cover with foam to reduce steam disaster. Transfer to tank truck or dedicated using explosion-proof pump

Inside the collector, recycle or transport to the waste disposal site for disposal

Part 6 Emergency Response for Leakage

Maximum allowable concentration: 100 ppm

Detection method: Gas chromatograph

Engineering control: In production workshops that are relatively enclosed, ventilation should be strengthened.

Respiratory system method: When the concentration in the air exceeds the standard, it is recommended to wear a filtered gas mask (half face mask) for emergency rescue or

Air respirators or oxygen respirators should be worn during evacuation.

Eye protection: Wear safety goggles.

Body protection: Wear work clothes.

Hand protection: Wear rubber gloves.

Other protective measures: Smoking, eating, and drinking are prohibited at the workplace, and alcoholic beverages should be avoided before work. After work, take a shower

Change clothes and undergo pre employment and regular physical examinations.

Personnel protection: Remove ignition sources. Ensure air circulation and appropriate personal protection when transferring spilled liquid. Avoid Skin and eye contact.

Environmental prevention: Untreated materials should not be discharged to prevent environmental pollution. If they flow into sewers or sewers, the government should be notified Relevant departments shall assist in handling the matter.

Elimination method: Use sand, soil, or other absorbent materials to absorb the leaked material, and then put it into an appropriate container

Handle according to local rules and regulations. Non sparking tools are required for operation.

Part 7 Handling and Storage

Handling: The handling personnel should receive professional training and strictly follow the operating procedures. Do not damage the container during transportation. Ensure that the containers and transportation equipment used for storage are grounded. Eliminate flames and any sources of ignition. Ensure good ventilation at the processing site. Equip corresponding varieties and quantities of fire-fighting equipment and emergency response equipment. Eating is prohibited in the workplace, and areas that come into contact with the skin should be cleaned immediately after handling.

Storage: Store in a cool and ventilated warehouse, away from sources of fire and heat. The warehouse must be equipped with lightning protection equipment. Stay away from sparks and heat sources. The storage temperature should not exceed 30 ℃. Keep the container sealed. It should be stored separately from oxidants and avoid mixing. Adopting explosion-proof lighting and ventilation facilities. Prohibit the use of mechanical equipment and tools that are prone to sparks. The storage area should be equipped with emergency response equipment for leaks and appropriate containment materials. The exhaust system should be equipped with a grounding device for electrostatic discharge. The lid should be tightly closed to keep the container sealed, and this product should be kept out of reach of children.

Part 8 Exposure Control/Personal Protection

Engineering control: Use a ventilation system that does not generate sparks or grounding, and separate it from other ventilation systems, with the exhaust outlet directly leading to the window

Outside.

Occupational exposure limit: Eight hour daily average allowable concentration TWA 100ppm (skin)

Short term average allowable concentration STEL125ppm (skin)

Monitoring method: Gas chromatography

Respiratory protection: Any detectable concentration, positive pressure comprehensive self carrying respiratory protective equipment

Positive pressure comprehensive gas supply respiratory protective equipment supplemented by positive pressure self carrying respiratory protective equipment

Eye protection: chemical safety goggles

Body protection: Protective clothing, preferably made of polyethylene or PA materials

Hand protection: Protective gloves, preferably made of polyvinyl alcohol or PA

Other protective measures: Wear gas masks with organic vapor filters and escape type self carrying respiratory protective equipment

Part 9 Physical and Chemical Properties

Appearance and condition: viscous fluid

Odor:

PH: None

Purity (%): None

Color: Light yellow

Melting point (℃): Not applicable

Flash point (open cup ℃): greater than 100

Boiling point/boiling range (℃): Not applicable

Volatility rate (butyl ester 100): Not applicable

Water miscibility: slightly soluble in water

Relative density (water=1): Not applicable

Relative vapor density (air=1): Not applicable

Explosion temperature (℃): No data available

Explosion online% (V/V): No data available

Explosion offline% (V/V): No data available

Solubility: Slightly soluble in water

Main use: Printing special high gloss and high durability gloss oil, suitable for printing and packaging of wine boxes, gift boxes, etc.

Other physicochemical properties: No data available

Part 10 Stability and Reactivity

Stability: Stable material properties when stored and used at normal ambient temperatures.

Dangerous reaction: There is a risk of fire and explosion when in contact with prohibited substances such as strong oxidants.

Environment to avoid: exposure to high temperatures or contact with fire sources, static discharge areas.

Harmful degradation substances to the human body: The combustion process will produce odors containing carbon dioxide and other toxic substances, as well as strong black smoke.

Part 11 Toxicological Information

Toxicity: Belongs to the low toxicity category. Strong skin irritation.

Acute toxicity: No data available

Inhalation of solvent vapor: has anesthetic and irritating effects. Inhalation can cause inhibition and anesthesia of the central nervous system; Gastrointestinal reactions, such as nausea, vomiting, loss of appetite, diarrhea, and respiratory irritation symptoms; There is no discomfort below 84mg/m3.

Accidental entry: During swallowing and vomiting, if a small amount of liquid enters the respiratory tract, it can cause bronchitis and pulmonary edema, leading to
Mild poisoning.
Skin contact: Regular and prolonged contact can irritate the skin and cause dermatitis.
Accidental eye contact: discomfort and inflammation in the eyes.

Part 12 Ecological Information

Liquidity: fluids
Stability and degradability: Solid resins do not biodegrade and solvents evaporate.
Other harmful effects: This substance poses a serious threat to the environment, can cause pollution to the air, water environment, and water resources, and is harmful to fish or feeding
Dairy animals should be given special attention. Can be oxidized and degraded by organisms and microorganisms.

Part 13 Abandoned Disposal

Excess liquids or waste should be labeled and disposed of in accordance with current national and local regulations, usually requiring incineration
Chemical destruction.
Solid waste can be landfilled, but an approved source of waste residue should be sought.
Empty containers can be cleaned with metal scraping and reused.
Empty containers pose a risk of fire and explosion.

Part 14 Transportation Information

Land transportation	Organization)
Sea freight	Level 3 (9.9)
air transport	UN 1 8 6 6
Hazard codes	PG II
UN number	Black small rubber bucket 5kg/can
Packaging Group	Avoid severe collisions during transportation, and the
Packaging method	packaging should be labeled with flammable and hazardous
Transportation precautions	materials to avoid exposure to sunlight and rain
Drenching	Hazard signs
Article 84 of Road Traffic Safety Rules	Dangerous language
Rules for Loading Dangerous Goods on Ships	Safety language
IATA/ICAO	
Classification (International Maritime	3

Part 15 Regulatory Information

Harmful.

Flammable, harmful when inhaled and in contact with the skin, causing discomfort.

Avoid contact with skinConstruction site, pay attention to ventilation。

Part 16 Other Information

Reference solvent manual

This data is a product that meets health and safety requirements, and therefore should not be construed as a guarantee of product characteristics. If there is any personal injury or environmental situation, it is related to the method of use, and our company is not responsible for this.

Reviewed by the Technical Department: Liu Ruitao