JIANGSU KUANGSHUN PHOTOSENSITIVITY NEW-MATERIAL STOCK CO., LTD.

Material Safety Data Sheet

1.Identification of the substance and of the company

Product number	KSM-388W-HF
Trade name	Thermal curable marking ink
Company	JIANGSU KUANGSHUN PHOTOSENSITIVITY NEW-MATERIAL STOCK CO., LTD.
Add	NO.18，HUACHENG ROAD，QINGYANG INDUSTRIAL AREA，JIANGYIN CITY，JIANGSU PROVINCE
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2.Chemical characterization:

Chemical Name	CAS.NO	Percentage by weight
Phenolic epoxy resin	29690-82-2	10%-30%
Bisphenol A epoxy resin	25068-38-6	10%-30%
solvent (DBE)	95481-62-2	10%-30%
Filler （SiO_2）	14464-46-1	＜10%
Pigment	13463-67-7	20%-40%
Curing acclerant	461-58-5	＜10%
Surface additives	63148-62-9	＜10%

3.Hazards identification

3.1 Information concerning particular hazards for human and environment:

The most important effect: Inhibit the central nervous system, vomiting will be swallowed down to breathe into the lungs. And exposing in the high concentration may make you lose your consciousness.

Health effect: Steam released into the atmosphere would quickly break down with the help of H_2.

Environment effect: It is lighter than air and easy to spread to distant.

Special effect: No.

The main syptoms: Headache, vomiting, vertigo, tired, dry skin, burning, swelling, corne-burning dyspnea.

3.2 Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4.First Aid Measure

4.1 General information: The vapor would stimulate the eyes ,mucosal and high concentration could cause narcotic.

4.2 Eyes: Remove contact lenses. Flush with water or saline for 15 minutes. Get medical aid.

4.3 Skin: Wash skin with soap and water for 15 minutes. Get medical aid if symptoms persist.

4.4 Inhalation: Immediately remove from exposure to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

4.5 Ingestion: Do not induce vomiting. If conscious, give 1-2 glasses of water. Get medical aid.

4.6 Special note:

Protection of first-aid personnel: C level protective equipment should be wearing and in safe area to do the first-aid.

5.Fire Fighting Measures

5.1 Extinguishing agent:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

5.2 For safety reasons unsuitable Extinguishing agent:

Other Extinguishing agents are not applicable.

5.3 Special exposure hazards:

No unsusual fire or exolosion hazards are anticipated. Before the first fire-fighting to stop the leakage, or toxic gases in the air is too hazardous to the human body.

5.4 Protective equipment:

Wear full protective equipment and a self-contained breathing apparatus.

6.Accidental Release Measures

6.1 Person-related safety precautions:

Wear appropriate protective eyeglasses or chemical safety goggles. Wear appropriate protective clothing to prevent skin contact. Use a NIOSH approved respirator when necessary.

6.2 Measures for cleaning:

Remove all sources of ignition. Provide adequate ventilation. Wear appropriate personal

protection.

Sprinkle absorbent compound onto spill, then sweep into a plastic or metal container.

Wipe up further residue with paper towel and place in container. Wash spill area with soap and water.

Ventilate the area with fresh air.

7.Handling and Storage

7.1 Handling:

Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Do not expose container to heat or flame.

7.2 Storage:

Keep away from sources of ignition. Store in a cool, dry, well ventilated area, away from incompatible substances. Keep from freezing.

8.Exposure Controls

8 hours allowing concentration	25ppm（DEAC）
Short time allowing concentration	700ppm below（DEAC）
Maximum allowing concentration	50ppm（DEAC）

8.1 Additional information about design of technical facilities:

Use with appropriate local exhaust ventilation.

Provide appropriate local exhaust ventilation on open containers.

Store away from heat.

Store out of direct sunlight.

8.2 Ingredients with limit values that require monitoring at the workplace:

9.Physical and Chemical Properties

General Information :

Physical State: Liquid **Odor:** mild **Colour:** White **Flash Point**: 130℃ **Decomposition temperature:** 300℃ **Spontaneous combustion temperature:** no spontaneous combustion

Density: 1.35 (H_2O=1) **Viscosity:** (25℃)： 240-320PS **Vapor Pressure:** 0.4mmHg/25℃ **Vapor Density:** 0.9g/cm^3 **pH**: 6-7

10.Stability and Reactivity

10.1 Thermal decomposition /condition to be avoided:

Stability: Stable at normal temperatures and pressures.

Conditions to avoid: Temperatures over 40℃, ignition sources.

Incompatibilities: None

Polymerization: Will not occur.

10.2 Dangerous decomposition products:

Decomposition: Carbon monoxide, carbon dioxide, nitrogen oxides

11.Toxicological Information

11.1 Acute toxicity

Liquid、vapor would irritate eyes ,mucosa and skin.

11.2 The main impact of stimulus

Inhalation: 1. Shortly exposing in 200ppm concentration area would stimulate the throat.

2. Exposing in 700ppm concentration area would cause nausea and vomiting.

3. Exposing in high concentration area（about1000ppm）would cause action lack of coordination、loss of consciousness and even death.

4. Exposing in high concentration area would cause liver and kidney damage.

Skin : 1. causing red spot ,dry skin and dermatitis.

2. vapor would stimulate skin.

Eyes : vapor would stimulate eyes.

swallow: stimulating the esophagus.

11.3 Other toxicology information

Local effect: 500mm/24H（rabbit skin）causing minor irritation。

57mm/24H（rabbit skin）causing moderate irritation。

Long-term effect:

1、Long-term exposing would causing dermatitis.

2、Liver and kidney damage.

12.Ecological Information

General Information: Avoid runoff into storms and sewers which lead into waterways. Water runoff can cause environmental damage.

Environmental Impact Data: (percentage by weight)

CFC: 0 **HFC:** **Cl.Solv.:** 0 **VOC:** 53 **HCFC:** 0 **ODP:** 0

13.Disposal Information

13.1 Product as sold: Non-hazardous, however used product may contain possible contaminants (solder) that could make the product hazardous. Dispose of in accordence with all local, provincial, state, and federal regulations. Water runoff can cause environmental damage.

13.2 Product in use: Not determind.

13.3 Product after use: Not determind.

13.4 Product Packaging: Not determind.

13.4 Potential for Recycling: Reclaim if feasible

14.Transportation Information

1. Road Safty Rule 84

2. Ship loaded with against goods loading rules

3. Railway Administration carring against goods transportation rules

15.Regulatory Information

15.1 Labeling according to EU guidelines:

The product has classified and marked in accordance with EU Divectives.

15.2 Code letter and hazard designation of product:

Not applicable

15.3 Hazard-determining components of labeling:

Not applicable

15.4 Risk phrases:

Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing

15.5 Safety phrases:

Ventilate the area with fresh air.

SECTION 16：Other Information

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Guidance Department :Quality Department

Modify the description:

Additional information:None