


# SAFETY DATA SHEET

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

Product name: M Series Silver Ink
Other name: -
Recommended application and limited use: screen printing
Company: MINFEI CHEMICALS INDUSTRIES CO., LTD Address: No.32, Ln.138, Da'an Rd., Thcheng Dist., New Taipei City, 23673, Taiwan Telephone: +886-2-2269-2527
Emergency telephone: +886-2-2269-2527 Fax: +886-2-2269-1802

## SECTION 2: Hazards identification

<b>Classification of the substance or mixture</b> Flammable liquids (Category 4) Acute toxicity, Oral (Category 4) Acute toxicity, Dermal (Category 4) Acute toxicity, Inhalation (Category 4) Skin corrosion/irritation (Category 2) Eye damage/eye irritation (Category 1) Carcinogenicity (Category 2) Specific target organ toxicity - single exposure Respiratory tract irritation (Category 3)
<b>Label elements</b>  Pictogram: Exclamation mark, Corrosion, Health Hazard Signal word: Danger <b>Hazard statement(s)</b> H227 Combustible liquid H302 Harmful if swallowed H312 Harmful in contact with skin H332 Harmful if inhaled H315 Causes skin irritation H318 Causes serious eye damage H351 Suspected of causing cancer H335 May cause respiratory irritation <b>Precautionary statement(s)</b> Wear protective gloves/ eye protection/ face protection. IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Other hazards: -

## SECTION 3: Composition/information on ingredients

Mixture:

Chemical properties:	
Component	Concentration
Isophorone (CAS No. 78-59-1)	35-40
Resin (CAS No. 24968-12-5)	35-40
Aluminum (CAS No. 7429-90-5)	17-18
Light aromatic solvent (CAS No. 64742-95-6)	7-8

Oleic acid (CAS No. 112-80-1)	0.5-1
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#### SECTION 4: First aid measures

<p>Description of first aid measures:</p> <p><b>If inhaled</b> If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.</p> <p><b>In case of skin contact</b> Wash off with soap and plenty of water. Consult a physician.</p> <p><b>In case of eye contact</b> Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.</p> <p><b>If swallowed</b> Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician</p>
<p><b>Most important symptoms and effects</b> Burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, central nervous system depression, narcosis</p>
<p><b>First-aid personnel protective equipment</b> Wear C level protective clothing</p>
<p><b>Indication of any immediate medical attention and special treatment needed</b> No data available</p>

#### SECTION 5: Firefighting measures

<p><b>Suitable extinguishing media</b> Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.</p>
<p><b>Special hazards arising from the substance or mixture</b> Carbon oxides</p>
<p><b>Special extinguishing processes</b> No data available</p>
<p><b>Advice for firefighters</b> Wear self-contained breathing apparatus for firefighting if necessary</p>

#### SECTION 6: Accidental release measures

<p><b>Personal precautions, protective equipment and emergency procedures</b> Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.</p>
<p><b>Environmental precautions</b> Prevent further leakage or spillage if safe to do so. Do not let product enter drains.</p>
<p><b>Methods and materials for containment and cleaning up</b> Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.</p>

#### SECTION 7: Handling and storage

<p><b>Precautions for safe handling</b> Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.</p>
<p><b>Conditions for safe storage, including any incompatibilities</b> Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.</p>

#### SECTION 8: Exposure controls/personal protection

<p><b>Appropriate engineering controls</b> Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.</p>
<p><b>Control parameters</b></p>

No data available.
<b>Personal protective equipment</b>
<b>Eye/face protection</b> Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
<b>Skin protection</b> The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
<b>Body Protection</b> Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Respiratory protection</b> Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
<b>Hygienic measure</b> No data available.

## SECTION 9: Physical and chemical properties

Appearance: Opaque viscous liquid	Odor: aromatic
Odor Threshold: -	Melting point: -
pH: -	Initial boiling point and boiling range: -
Flammability (solid, gas): -	Flash point: 54.5 °C
Decomposition temperature: -	Measurement: Closed cup
Auto-ignition temperature: -	Explosive limit: -
Vapor pressure: -	Vapor density: - (air = 1)
Density: 1.1 (water = 1)	Solubility: -
Partition coefficient: n-octanol/water: -	Evaporation rate: - (NBAC = 1)

## SECTION 10: Stability and reactivity

<b>Chemical stability</b> Stable in normal situation
<b>Possibility of hazardous reactions</b> Strong oxidation agent (ex. peroxide, nitrate, perchlorate, etc.) may cause fire or explosion
<b>Conditions to avoid</b> Heat, fire, electricity
<b>Incompatible materials</b> Strong oxidation agent (ex. peroxide, nitrate, perchlorate, etc.)
<b>Hazardous decomposition products</b> No data available.

## SECTION 11: Toxicological information

<b>Exposure route</b> Inhalation, ingestion, skin, eyes.
<b>Signs and Symptoms of Exposure</b> Burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, central nervous system depression, and narcosis.

<p><b>Acute toxicity</b>  LD50 Oral - rat - 1.870 mg/kg  LC50 Inhalation - guinea pig - 8 h - 4600 ppm  LD50 Dermal - rabbit - 1.382 mg/kg</p> <p><b>Skin corrosion/irritation</b>  Skin - rabbit - Mild skin irritation - 24 h</p> <p><b>Serious eye damage/eye irritation</b>  Eyes - rabbit - Eye irritation - 24 h</p> <p><b>Respiratory or skin sensitization</b>  no data available</p>
<p><b>Germ cell mutagenicity</b>  No data available</p> <p><b>Carcinogenicity</b>  This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.  Limited evidence of carcinogenicity in animal studies</p>

## SECTION 12: Ecological information

<p><b>Toxicity</b></p> <p><b>Toxicity to fish</b>  NOEC - Cyprinodon variegatus (sheepshead minnow) - 170 mg/l - 96 h  LC50 - Pimephales promelas (fathead minnow) - 145 mg/l - 96 h</p> <p><b>Toxicity to daphnia and other aquatic invertebrates</b>  LC50 - Daphnia magna (Water flea) - 120 mg/l - 48 h</p>
<p><b>Persistence and degradability</b>  No data available.</p>
<p><b>Bioaccumulation</b>  Lepomis macrochirus (Bluegill) - 14 d -0,0924 mg/l  Bioconcentration factor (BCF): 7</p>
<p><b>Mobility in soil</b>  no data available</p>
<p><b>Other adverse effects</b>  no data available</p>

## SECTION 13: Disposal considerations

<p><b>Waste treatment methods</b></p> <p><b>Product</b>  Offer surplus and non-recyclable solutions to a licensed disposal company.</p> <p><b>Contaminated packaging</b>  Dispose of as unused product.</p>
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## SECTION 14: Transport information

UN number: UN1210
UN proper shipping name: Printing ink
Transport hazard class: 3
Packaging group: III
Marine pollutant: No
Special precautions for user: -

## SECTION 15: Regulatory information

<p><b>REGULATORY INFORMATION</b>  This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.</p>
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## SECTION 16: Other information

Reference	1. CHEMINFO data base , CCINFO disc , 2000-3 2. HAZARDTEXT data base , TOMES PLUS disc , Vol.45 , 2000 3. RTECS data base , TOMES PLUS disc , Vol.45 , 2000 4. HSDB data base , TOMES PLUS disc , Vol.45 , 2000 5. Harmful chemical Substances , environmental protection administration Taiwan	
Make unit	Name: MINFEI CHEMICALS INDUSTRIES CO., LTD	
	Address: No.32, Ln.138, Da'an Rd., Thcheng Dist., New Taipei City, 23673, Taiwan TEL: +886-2-2269-2527	
Lister	Occupation: R.D. manager	Name: Chiang Ching Hua
Made date	May. 19, 2023	

Flame

Skull and crossbones

Health Hazard

Exclamation mark

Corrosion

Environment