

## Material Safety Data Sheet

### 1. Product and Company Identification

Product name: Art Clay Silver Oil Paste / medium  
Manufacturer: Aida Chemical Industries Co., Ltd.  
Address: 6-15-13 Minami-cho, Fuchu-shi, Tokyo  
Contact Department: Product Development Department  
Telephone: +81 (0) 42 334 6319  
Fax number: +81 (0) 42 224 6359  
Emergency contact: +81 (0) 42 366 8751 (DAC Overseas Division)  
Office hours: 9:00am – 18:00 pm

### 2. Composition, Information on Ingredients

Classification of Product: Oil Paste - Mixture  
Medium - Organic solvent  
Chemical Nature: Oil Paste - Silver (Ag)  
Heavy metal (Bi)  
Organic solvent substance ( N/D )  
Medium - Aromatic compound (N/D)  
Ester solvent ( N/D )  
Ingredients (% by wt.): Oil Paste - Silver / 90%,  
Heavy metal / less than 1%,  
Organic solvent substance / 9 to 10%  
Medium - Aromatic compound / 40 to 50%  
Ester solvent / 50 to 60%  
Official Reference Number: Oil Paste - Silver ( N/A )  
Heavy metal (Bi) ( N/D )  
Organic solvent substance (6)-524, (3)-1307, (9)-2578  
Medium - (9)-2578  
CAS Registry Number: Oil Paste - Silver 7440-22-4  
Heavy metal (Bi) 7440-69-9  
Organic solvent substance 64742-95-6  
Medium - 64742-94-5  
Dangerous Possibility: N/D

### 3. Hazardous Identification

Toxicity: Possible irritation to the skin and mucous membrane, irritation of upper respiratory depending on the working environment.  
Environmental Effects: N/D  
Physical and Chemical Hazard: Flammable substance  
Adverse Human Health Effects: Possible color change on mucous membrane for eye(s), nose and throat, and chronic irritation of respiratory organs, caused by long period use depending on the working environment.  
Classification system: N/D (Japan Standard Classification)

### 4. First Aid Measures

Inhalation: Blow nose and gargle. If signs / symptoms occur, remove person to fresh air. If signs / symptoms continue, call a physician.  
Skin Contact: Wash well with soap and water.  
Eye Contact: Immediately flush eye(s) with plenty of water until no foreign body is felt. Get immediate medical attention.  
Ingestion: Wash your mouth well with water and gargle. Get medical attention if necessary.

### 5. Fire-Fighting Measures

Extinguishing media: Water, Dry chemicals, CO2  
Specified method: In case of a small scale fire, use water, dry chemicals or CO2. In case of a larger scale fire, wear protective gas mask and use water spray method.

### 6. Accidental Release Measures

Health measures: Put on dust protection mask, goggle and gloves if necessary.  
Environmental measures: In case of large release, do not release to a sewer or natural environment.  
Removal method: Remove by wiping or mopping with a cloth, collect the release in a container.

### 7. Handling and Storage

Handling: Keep this product away from high heat or flame. Wash well with soap and water after skin contact. Put on dust protection mask, goggle and gloves if necessary.  
Storage: Keep in cool and dark place avoiding direct sunlight.

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### 8. Measures for Protecting Exposure

Measure to Install: Install ventilation system and sink near the working area.  
Protections: Put on protection mask, glasses, and gloves if possible.  
Hygienic Practice: Wash thoroughly after handling.

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### 9. Physical / Chemical Characteristics

Appearance: Oil Paste - Grayish white  
Medium - Transparent

Boiling Point: Oil Paste Silver 2155°C /°F  
Heavy metal (Bi) 1560°C /°F  
Organic solvent substance 190°C /°F  
Medium 190°C /°F

Melting Point: Oil Paste Silver 961°C / 1761.8°F  
Heavy metal (Bi) 271.3°C /°F  
Organic solvent substance N/D  
Medium N/D

Solubility: Oil Paste Silver / insoluble in water / soluble in nitric acid  
Heavy metal (Bi) insoluble in water / soluble in nitric acid  
Organic solvent substance / insoluble  
Medium Insoluble

Flash Point: Oil Paste Silver / none  
Heavy metal (Bi) / none  
Organic solvent substance / 67°C /°F  
Medium 65°C /°F

Combustible: Oil Paste Silver / incombustible  
Heavy metal (Bi) / incombustible  
Organic solvent substance / combustible  
Medium Combustible

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### 10. Stability and Reactivity

Stability: Stable under normal condition  
Hazardous Reaction: N/D  
Specifically for silver: Silver reacts with acetylene to form sensitive chemical compound, reacts with acid to cause high heat, and reacts to condensed hydrogen peroxide to form gaseous oxygen. Dry silver clay reacts with ammonia to form explosive compound.  
Condition to avoid: High temperature / high humidity  
Hazardous Decomposition: N/D

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### 11. Health Hazard

Acute Toxicity: N/D  
Skin Corrosion: Possible irritation to the skin and mucous membrane.  
Inhalation: Possible irritation of upper respiratory including soreness of nose and throat, coughing and sneezing from inhaling its vapor.

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### 12. Ecological Information

Mobility: May release in dust form in the air depending on the working environment.  
Contamination: N/D  
Decomposition: N/D  
Bioaccumulation: N/D

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### 13. Disposal Consideration

Disposal method: Following the handling of general industrial waste according to the instruction of the local authority. For incineration treatment, absorb in cloth and fire.

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#### 14. Transportation Information

International Regulation: Transport in accordance with federal, state and/or local regulations.  
Transportation Consideration: Avoid direct sun light. Use of fire near this product is strictly prohibited.  
Keep this product at room temperature and do not keep under 5°C / °F.  
Avoid a shock on the container.

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#### 15. Regulatory Information

Laws of Labor, Safety and Health: Silver / reporting material (#138 / silver and its water-soluble compound – under 1% inclusion)

Pollutant Release and Transfer Register: Silver / Category 1, Designated Chemical Material (#64 silver and its water-soluble compound – over 1% inclusion)

Ordinance Review for Regulation of Dangerous Substance, Chapter 1-12:  
Binder / Designated combustibility synthetic resins (other category)

\*Ensure this product in compliance with federal requirements and ensure doformity to local regulation and law.

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#### Other Information

Reference: Chemical Encyclopedia (KYORITSU SHUPPAN CO., LTD.)  
Chemical Merchandise of 12394 (THE CHEMICAL DAILY CO., LTD.)  
Website of Japan Chemical Industry Association(JCIA) <http://www.nikkakyo.org/> National Institute of  
Technology and Evaluation (NITE) <http://www.nite.go.jp/>  
JIS Z 7250 (Japanese Industrial Standards Z-7250)

Fire Precedent: None

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**This Material Safety Data Sheet is complied with JIS Z 7250 and formatted as same as ISO11014-1. These data are based on our present state of knowledge and experience, and correct as of the date issued. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. User is responsible for determining whether above mentioned product is fit for a particular purpose and suitable for user's method of use or application.**

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