

Material Safety Data Sheet

1. Product and Company Identification

Product name: Art Clay Silver Basic series
Clay type, Paper type and Slow Dry type
Art Clay Silver 650 series
Clay type, Paste type, Syringe type, Slow Dry type and Overlay Silver Paste
Art Clay Silver ST series
Clay type, Paste type and Syringe type

Manufacturer: Aida Chemical Industries Co., Ltd.
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Contact Department: Product Development Department
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Office hours: 9:00am – 18:00 pm

2. Composition, Information on Ingredients

Classification of Product: Mixture
Chemical Nature: Silver (Ag) and Binder (Organic materials)
Ingredients (% by wt.): Silver 80-95% and Binder 5-20%
Official Reference Number: Silver: N/A, and Binder: N/D
CAS Registry Number: Silver: 7440 – 22 – 4, and Binder: N/D
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: Avoid contact with a strong acid and strong base.
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 vacuuming or mop with a cloth, and then wash.

7. Handling and Storage

Handling: 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.

8. Measures for Protecting Exposure

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

9. Physical / Chemical Characteristics

Appearance: Color / white, Order / none
Boiling Point: Silver / 2155°C / 3911°F
Melting Point: Silver / 961°C / 1761.8°F
Solubility: Silver / insoluble in water / soluble in nitric acid
Binder / soluble in water
Flash Point: Silver / none
Binder / 300-400°C / 572-752°F
Combustible: Silver / incombustible
Binder / combustible

10. Stability and Reactivity

Stability: Stable
Hazardous Reaction: 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: None

11. Health Hazard

Acute Toxicity: None
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.

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

13. Disposal Consideration

Disposal method: Following the handling of general industrial waste according to the instruction of the local authority.

14. Transportation Information

International Regulation: Transport in accordance with federal, state and/or local regulations.
Transportation Consideration: Avoid high temperature, high humidity and shock on the container.

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 conformity to local regulation and law.

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

This Material Safety Data Sheet is compiled 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.
