Original data written: Nov.30<sup>th</sup>, 2009

# Material Safety Data Sheet

1. Product and Company Identification

Product name: Art Clay Copper

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 (closed on Sat. Sun., National holiday, and Dec.30-Jan 5<sup>th</sup>)

## 2. Composition, Information on Ingredients

Classification of Product: Mixture

Chemical Name: Copper and Binder (Organic materials)
Ingredients (% by wt.): Copper---- 80-95% Binder--- 5-20%

Chemical Nature (Chemical formula or structure):

Copper--- Cu Binder --- N/D\*

Official Reference Number (in Gazette List in Japan):

Copper --- Exempt from Japanese Chemical Substances Control Act

Binder--- N/A\*

CAS Registry Number: Copper--- 7440-50-80 Binder --- N/D

Dangerous Possibility: None

\*N/D---No Data, N/A---Not Applicable

### 3. Hazardous Identification

Toxicity: Possible irritation to the skin and mucous membrane, irritation of upper respiratory

system depending on the working environment.

Environmental Effects: N/D

Physical and Chemical Hazard: Avoid contact with strong acids and strong base chemical compounds.

Adverse Human Health Effects: Possible color change of mucous membrane for eye(s), nose and throat, and

chronic irritation of respiratory organs, caused by long period of use, depending

on 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 a fresh air environment. 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 present. Get immediate medical

attention.

Ingestion: Wash your mouth well with water and gargle. Seek medical attention if necessary.

#### 5. Fire-Fighting Measures

Extinguishing media: Water, Dry chemicals

Specified method: In case of a small scale fire, use water, or dry chemicals. 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 dispose of in a sewer or natural environment.

Removal method: Remove by vacuuming or mop up 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 a cool and dark place avoiding direct sunlight.

## 8. Measures for Protecting Exposure

Suggested measure: 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

Color: Red Odor: N/D

Boiling Point: Copper / 2582°C / 4679.6°F Melting Point: Copper / 1083°C / 1981.4°F

Solubility: Copper / insoluble in water / soluble in nitric acid

Binder / soluble
Flash Point: Copper Silver / N/D

Binder / Approx.300-400°C / 572-752°F

Combustible: Copper / incombustible Binder / combustible

10. Stability and Reactivity

Stability: Copper turns black when exposed in the air.

Hazardous Reaction: N/D. However, copper reacts with acetylene to form sensitive chemical compound. It holds

danger of explosion when copper reacts with Hydrochloride, Bromate, and lodate.

Condition to avoid: High temperature / high humidity / contact with incompatible hardous materials

Hazardous decomposition: Carbon monoxide / Carbon dioxide

11. Health Hazard

Acute Toxicity: N/D

Skin Corrosion: Possible irritation to the skin and mucous membrane.

Inhalation: Possible irritation of upper respiratory system including soreness of nose and throat,

coughing and sneezing.

12. Ecological Information

Mobility: May release as dust form in the air depending on the working environment.

Contamination: N/D Decomposition: N/D Bioaccumulation: N/D

13. Disposal Consideration

Disposal method: Follow the handling of general industrial waste according to the instruction of your local

authority.

14. Transportation Information

International Regulation: None. 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

Industrial Safety and Health Law: Copper and its mixture (Listed by No.379 in Appended Table 9 in the Article 18-2).

Applied range --- weight less than 0.1%.

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) <a href="http://www.nikkakyo.org/">http://www.nikkakyo.org/</a> National Institute of Technology and Evaluation (NITE) <a href="http://www.nite.go.jp/">http://www.nite.go.jp/</a>

JIS Z 7250 (Japanese Industrial Standards Z-7250)

Fire Precedent: None

This Material Safety Data Sheet complies with JIS Z 7250 and formatted as same as ISO11014-1. This data is 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.