

## SAFETY DATA SHEET(SDS)

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifiers

Product name: Marker Pen

CAS-No. : 64-17-5

#### 1.2 Details of the supplier:

Company: CMI

Address: Shanghai, China

#### 1.3 Relevant identified uses

Identified uses: Marking Paper, Media, Arts and Crafts

### 2. HAZARDS IDENTIFICATION

#### 2.1 GHS Classification

Flammable liquids (Category 2): H225

Eye irritation (Category 2A): H319

#### 2.2 GHS Label elements, including precautionary statements



Pictogram:

Signal word: Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P403 + P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/ container to an approved waste disposal plant.

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### **3.1 Substances**

Synonyms: Ethanol

Purity: ≥95.5%

CAS-No.: 64-17-5

EC-No.: 200-578-6

Formula: C<sub>2</sub>H<sub>6</sub>O

### **4. FIRST AID MEASURES**

#### **4.1 Description of first aid measures**

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**In case of skin contact:** Remove contaminated clothing and wash off with plenty of clean water.

**In case of eye contact:** Rinse thoroughly with plenty of clean water or saline solution and consult a physician.

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**If swallowed:** Rinse mouth with plenty of water, induce vomiting. Consult a physician.

#### **4.2 Indication of any immediate medical attention and special treatment needed**

No data available.

### **5. FIREFIGHTING MEASURES**

#### **5.1 Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical, sandy soil or carbon dioxide.

#### **5.2 Special hazards arising from the substance or mixture**

No data available

#### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **6. ACCIDENTAL RELEASE MEASURES**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

### **6.2 Environmental precautions**

Prevent further leakage or spillage. Do not let product enter drains or sewage system.

### **6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

## **7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

### **7.2 Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place (Temperature below 30°C). Keep away from the fire and heat and avoid direct sunlight.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **Personal protective equipment**

##### **Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards.

##### **Skin protection**

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.

Full contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.2 mm

Break through time: 38 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### **Body Protection**

Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose 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.

### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance Form: liquid, clear, colourless

Odour: alcohol

Odour Threshold: No data available

Flash point: 12 °C- closed cup

Initial boiling point: 78.3 °C

Melting point/freezing point: -143.99 °C

Upper explosion limit: 19 %(V)

Lower explosion limit: 3.3 %(V)

Vapour pressure: 44.6 mmHg at 20.0 °C

Vapour density: No data available

Relative density 0.79 g/cm<sup>3</sup>

Water solubility: completely soluble

Auto-ignition temperature: 363.0 °C

Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

## **10. STABILITY AND REACTIVITY**

**Reactivity:** No data available

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions:** Vapours may form explosive mixture with air.

**Conditions to avoid:** Heat, flames and sparks.

**Incompatible materials:** Alkali metals, Oxidizing agents, Peroxides

### **Hazardous decomposition products**

Other decomposition products - No data available

Hazardous decomposition products formed under fire conditions. - Carbon oxides

## **11. TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

LD50 Oral - Rat - 7060/kg

LC50 Inhalation - Rat - 4 h - 124.7 mg/l

#### **Skin corrosion/irritation**

Skin - 400mg Rabbit - Slight

#### **Serious eye damage/eye irritation**

Eyes - 500mg Rabbit - Causes serious eye irritation.

#### **Respiratory or skin sensitization**

Sensitization test: No data available

**Germ cell mutagenicity:** No data available

#### **Carcinogenicity**

Carcinogenicity - Mouse - Oral: 320mg/kg/50W-I

#### **Reproductive toxicity**

Reproductive toxicity - Human - female - Oral: 41mg/kg

**Specific target organ toxicity - single exposure:** No data available

**Specific target organ toxicity - repeated exposure:** No data available

**Aspiration hazard:** No data available

**Additional Information:** NA

## **12. ECOLOGICAL INFORMATION**

Ecotoxicity: No data available

Persistence and degradability: Readily biodegradable.

Bioaccumulative potential: Not expected.

Mobility in soil: No data available

Other adverse effects: No data available

## **13. DISPOSAL CONSIDERATIONS**

### **Waste treatment methods**

**Product:** Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging:** Dispose of as unused product.

### **14. TRANSPORT INFORMATION**

Dangerous Goods Code (UN number): 1170 Class: 3

Packing group: II

Proper shipping name: Ethanol

Reportable Quantity (RQ): /

Poison Inhalation Hazard: No

Transportation precautions: before transportation, check whether the packaging container is intact and sealed. During transportation, make sure that the container is not leaking, collapsing, falling or damaged. Do not mix shipped with oxidants, acids, halogens, edible chemicals, etc.

### **15. REGULATORY INFORMATION**

**GHS** -- Globally harmonized system of classification and labeling of chemicals, third revised edition. Transport of dangerous goods, sixteenth revised edition.

### **16. OTHER INFORMATION**

Full text of H-Statements referred:

H225        Highly flammable liquid and vapour.

H319        Causes serious eye irritation.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.