

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

|              |  |
|--------------|--|
| Product Name | Artline PAINT MARKER<br>EK-409XF, EK-400XF,EK-440XF,EK-444XF<br>(All colors) |
| General Use  | Paint marker   |
| MSDS Number  | EA1001B-0101   |

#### MANUFACTURER

|                  |   |
|------------------|---|
| Company Name     | Shachihata Co.,Ltd.                                   |
| Address          | 4-69,Amatuka-chou,Nishi-ku,Nagoya-shi,Aichi-ken,Japan |
| Telephone Number | ++ 81 52 521 3600                                     |
| Fax Number       | ++ 81 52 521 3899                                     |

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

|                     |         |
|---------------------|---------|
| Substance / Mixture | Mixture |
|---------------------|---------|

#### Hazardous Ingredients

| Chemical or<br>Common Name(s) | wt.%    |         | Other   | CAS.       | EINECS    |
|-------------------------------|---------|---------|---------|------------|-----------|
|                               | WHITE   | BLACK   | colors  | Number     | Number    |
| Cyclohexane,methyl-           | 20 ~ 30 | 40 ~ 50 | -       | 108-87-2   | 203-624-3 |
| Alkanes,C9-C12-iso-           | 1 ~ 10  | 1 ~ 10  | -       | 90622-57-4 | 292-459-0 |
| Alkanes,C7-C10-iso-           | -       | -       | 30 ~ 50 | 90622-56-3 | 292-458-5 |
| Carbon black                  | -       | 1 ~ 10  | -       | 1333-86-4  | 215-609-9 |
| Titanium oxide                | 30 ~ 40 | -       | 1 ~ 30  | 13463-67-7 | 236-675-5 |

EU symbol(s) and risk phrase(s) is specified in 15. REGULATORY INFORMATION.

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Flammable liquid with a solvent odor.  
May cause allergic skin reaction.

#### POTENTIAL HEALTH EFFECT

No data available

#### POTENTIAL ENVIRONMENTAL EFFECTS

No data available

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### 4. FIRST AID MEASURES

|                              |   |
|------------------------------|---|
| INHALATION                   | Move to well ventilated place.<br>See medical advice immediately.                   |
| EYE                          | Immediately flush with plenty of water.<br>See medical advice immediately.          |
| SKIN                         | Wipe off with dry cloth and wash with mild soap.<br>See medical advice immediately. |
| INGESTION                    | See medical advice immediately.   |
| PROTECTION TO FIRST – AIDERS | No data available   |

#### NOTE TO PHYSICIAN

Treatment may vary with condition of victim and specifics of incident.

### 5. FIRE FIGHTING MEASURES

|                            |   |
|----------------------------|---|
| FLAMMABLE PROPERTIES       | Highly flammable  |
| EXTINGUISHING MEDIA        | Dry chemical powder, foam or carbon dioxide.                      |
| FIRE FIGHTING INSTRUCTIONS | Wear full fire-fighting turn-out gear and respiratory protection. |

### 6. ACCIDENTAL RELEASE MEASURES

|             |  |
|-------------|--|
| LAND SPILL  | Wipe off with dry cloth.   |
| WATER SPILL | Contain spilled liquid with sand or earth.<br>Do not use combustible materials, such as sawdust. |

### 7. HANDLING AND STORAGE

|            |  |
|------------|--|
| HANDLING : | Use only in the well-ventilated areas.<br>Avoid contact with skin or eyes , or clothing.<br>Avoid inhalation and ingestion.<br>Avoid high temp. and fire.<br>Wash thoroughly after handling. |
| STORAGE :  | Store in a cool, dry, well-ventilated location.<br>Keep away from heat, sunlight.<br>Keep away from children.  |

**MATERIAL SAFETY DATA SHEET****8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

## EXPOSURE LIMIT VALUES

## OSHA PEL (1994)

|                           |                                   |
|---------------------------|-----------------------------------|
| [Cyclohexane,methyl-] TWA | 500 ppm (2,000mg/m <sup>3</sup> ) |
| [Carbon black] TWA        | 3.5 mg/m <sup>3</sup>             |
| [Titanium oxide] TWA      | 15 mg/m <sup>3</sup> (total dust) |

## ACGIH TLV (2003)

|                           |                       |
|---------------------------|-----------------------|
| [Cyclohexane,methyl-] TWA | 400 ppm               |
| [Carbon black] TWA        | 3.5 mg/m <sup>3</sup> |
| [Titanium oxide] TWA      | 10 mg/m <sup>3</sup>  |

## EN LIMIT (2000/39/EN)

Not established

## EXPOSURE CONTROLS

## Occupational Exposure Controls

## Engineering Controls

Use exhaust ventilation to keep airborne concentration below exposure limits.

## Personal Protection

## Respiratory Protection

Use with local exhaust ventilation, when in long use.

## Hand Protection

Not required, but wear safety gloves, if necessary.

## Eye Protection

Not required, but wear safety glasses, if necessary.

## Skin Protection

To prevent ANY contact, wear impervious clothing such as gloves, apron, as appropriate.

## Environmental Exposure Controls

Not established

**9. PHYSICAL AND CHEMICAL PROPERTIES**

## Appearance

Physical state

Liquid

## Odor

minor solvent odor

## Boiling Point / Boiling Range

No data available

## Flash Point

( White,Black ) - 5

(Other colors ) 5

&lt;Close Cup&gt;

## Explosive Properties

No data available

Relative Density (g/cm<sup>3</sup>)

(White ) 1.2 ~ 1.3 ( Other colors ) 0.8 ~ 1.0

## Solubility [ Water ]

Insoluble

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**MATERIAL SAFETY DATA SHEET****10. STABILITY AND REACTIVITY**

|  |                   |
|--|-------------------|
| CONDITIONS TO AVOID                          | No data available |
| STABILITY                                    | No data available |
| MATERIALS TO AVOID                           | No data available |
| HAZARDOUS REACTIONS / DECOMPOSITION PRODUCTS | No data available |

**11. TOXICOLOGICAL INFORMATION**

Acute Toxicity (RTECS : 2004-11)

|                       |            |                           |                                 |
|-----------------------|------------|---------------------------|---------------------------------|
| [Cyclohexane,methyl-] |            |                           |                                 |
|                       | Oral       | LD <sub>50</sub> (rat)    | > 3,200 mg/kg                   |
|                       | Inhalation | TCL <sub>0</sub> (rat)    | 82 mg/ m <sup>3</sup> /1H       |
| [Alkanes,C9-C12-iso-] |            |                           |                                 |
|                       | Oral       | LD <sub>50</sub> (rat)    | > 10 mg/kg                      |
|                       | Inhalation | TCL <sub>0</sub> (rat)    | > 12,200 mg/ m <sup>3</sup> /4H |
|                       | Skin       | LD <sub>50</sub> (rabbit) | > 3,200 mg/kg                   |
| [Carbon black]        |            |                           |                                 |
|                       | Oral       | LD <sub>50</sub> (rat)    | > 15,400 mg/kg                  |
|                       | Skin       | LD <sub>50</sub> (rabbit) | > 3 mg/kg                       |
| [Titanium oxide]      |            |                           |                                 |
|                       | Oral       | TDL <sub>0</sub> (rat)    | 60 mg/kg                        |
|                       | Inhalation | TCL <sub>0</sub> (rat)    | 50 mg/ m <sup>3</sup> /6H/13W-I |

**12. ECOLOGICAL INFORMATION**

|                           |                   |
|---------------------------|-------------------|
| ECOTOXICITY               | No data available |
| BIOACCUMULATIVE POTENTIAL | No data available |
| OTHER ADVERSE EFFECTS     | No data available |

**13. DISPOSAL CONSIDERATIONS**

Comply with all federal,state,EU,national and local regulations.  
Do not dump this product into sewers , on the ground or into any body of water.

**14. TRANSPORT INFORMATION**

|                       |                         |
|-----------------------|-------------------------|
| UN CLASS              | 3                       |
| UN Packing Group (PG) |                         |
| UN NUMBER             | 1210                    |
| Proper Shipping Name  | Printing ink, flammable |

**MATERIAL SAFETY DATA SHEET****15. REGULATORY INFORMATION**

Refer to any other federal , state , EU , national and local regulations.

OSHA STATUS : This product is hazardous under 29 CFR 1910.1200.

TSCA STATUS : All components on TSCA INVENTORY.

CERCLA REPORTABLE QUANTITY (40 CFR 117,302) :  
Not applicable

SARA TITLE : Not applicable

This product is classified as follows ,

|                         |          |                     |                            |
|-------------------------|----------|---------------------|----------------------------|
| [Cyclohexane,methyl-] : | [F,Xn,N] | R:11-38-51/53-65-67 | S:(2-)9-16-33-61-62        |
| [Alkanes,C9-C12-iso-] : |          | R:10-65-66          | S: (2-)23-24-33-43A-62     |
| [Alkanes,C7-C10-iso-] : |          | R:11-65-67          |                            |
|                         |          |                     | S:(2-)9-16-23-24-33-43A-62 |

|          |    |                                  |
|----------|----|----------------------------------|
| Symbol : | F  | ( Highly Flammable)              |
|          | Xn | ( Harmful)                       |
|          | N  | ( Dangerous for the environment) |

|               |       |  |
|---------------|-------|--|
| Risk Phrase : | 10    | ( Flammable)   |
|               | 11    | ( Highly flammable)  |
|               | 38    | ( Irritating to skin)  |
|               | 51/53 | ( Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.) |
|               | 65    | ( Harmful: may cause lung damage if swallowed.)  |
|               | 66    | ( Repeated exposure may cause skin dryness or cracking.)                                       |

|                 |     |  |
|-----------------|-----|--|
| Safety Advice : | 67  | ( Vapours may cause drowsiness and dizziness.)   |
|                 | 2   | ( Keep out of the reach of children.)  |
|                 | 9   | ( Keep container in a well-ventilated place.)  |
|                 | 16  | ( Keep away from sources of ignition – No smoking.)  |
|                 | 23  | ( Do not breathe gas/fumes/vapour/spray.)  |
|                 | 24  | ( Avoid contact with skin.)  |
|                 | 33  | ( Take precautionary measures against static discharges.)  |
|                 | 43A | ( In case of fire, use sand, earth, chemical powder or foam.)  |
|                 | 61  | ( Avoid release to the environment. Refer to special instructions/safety data sheets.)                     |
|                 | 62  | ( If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.) |

Please refer to any other EU, national and local measures.

**16. OTHER INFORMATION**

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