MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Artline PAINT MARKER

EK-409XF, EK-400XF, EK-440XF, EK-444XF

(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	wt.%		Other	CAS.	EINECS
Common Name(s)	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

MATERIAL SAFETY DATA SHEET

4. FIRST AID MEASURES

INHALATION Move to well ventilated place.

See medical advice immediately.

EYE Immediately flush with plenty of water.

See medical advice immediately.

SKIN Wipe off with dry cloth and wash with mild soap.

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.

Do not use combustible materials, such as sawdust.

7. HANDLING AND STORAGE

HANDLING: Use only in the well-ventilated areas.

Avoid contact with skin or eyes, or clothing.

Avoid inhalation and ingestion. Avoid high temp. and fire. Wash throughly after handling.

STORAGE: Store in a cool, dry, well-ventilated location.

Keep away from heat, sunlight. 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/m³)

[Carbon black] TWA 3.5 mg/m³

[Titanium oxide] TWA 15 mg/m³ (total dust)

ACGIH TLV (2003)

[Cyclohexane,methyl-]TWA 400 ppm [Carbon black] TWA 3.5 mg/m³ [Titanium oxide] TWA 10 mg/m³

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 <Close Cup>

Explosive Properties No data available

Relative Density (g/cm 3) (White) 1.2 ~ 1.3 (Other colors) 0.8 ~ 1.0

Solubility [Water] Insoluble

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_{50} (rat) > 3,200 mg/kg Inhalation TCL_0 (rat) 82 mg/ m³/1H

[Alkanes,C9-C12-iso-]

[Carbon black]

Oral LD_{50} (rat) > 15,400 mg/kg Skin LD_{50} (rabbit) > 3 mg/kg

[Titanium oxide]

Oral TDL_0 (rat) 60 mg/kg

Inhalation TCL_0 (rat) 50 mg/ m³/6H/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)

(Dangerous for the environment) N

Risk Phrase: 10 (Flammable)

> Highly flammable) 11 (Irritating to skin) 38

51/53 (Toxic to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.)

(Harmful: may cause lung damage if swallowed.) 65

66 (Repeated exposure may cause skin dryness or cracking.)

67 (Vapours may cause drowsiness and dizziness.)

(Keep out of the reach of children.) Safety Advice: 2

> 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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