MATERIAL SAFETY DATA SHEET

[MSDS NO. EK900XF_c_Au]

PRODUCT :

Artline METALLIC INK MARKER

EK-900XF, EK-990XF, EK-999XF, EK-993

(Gold)(Silver)

Issue Date 19 July,2013

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Artline paint marker

Other Names:

Recommended Use: paint marker

Supplier name/address/telephone no./Emergency phone number

[JAPAN]

SUPPLIER NAME: Shachihata Inc.

ADDRESS: 4-69, Amazuka-chou, Nishi-ku, Nagoya, 451-0021, Japan

TELEPHONE NO.: ++ 81 52 521 3600 FAX NUMBER: ++ 81 52 521 3899

[AUSTRALIA]

AGENT: Pelikan Artline Pty Limited

ABN 51 084 958 556

ADDRESS: 2 Coronation Avenue, Kings Park,

Blacktown Business Centre NSW 2148

TELEPHONE NO.: 02-9674-0900 FAX NO.: 02-9674-0910

EMERGENCY PHONE NUMBER: 02-9674-0900 or Mobile: 0423-782-595

HAZARDS IDENTIFICATION

Classified as Hazardous according to the criteria of Worksafe Australia

[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

Symbol: (Highly flammable)

Xn Harmful)

Dangerous for the environment) Ν

Risk Phrase: 10 Flammable)

65

62

Highly flammable) 11 38 Irritating to skin)

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

adverse effects in the aquatic environment.) Harmful: may cause lung damage if swallowed.)

Repeated exposure may cause skin 66

dryness or cracking.)

Safety Phrase: 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/vapor/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 (Avid release to the environment.

> Refer to special instructions/safety data sheets.) (If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.)

COMPOSITION / INFORMATION ON INGREDIENTS (INK)

<MIXTURE>

Chemical or	wt.%			CAS.
Common Name(s)		Gold	Silver	Number
Cyclohexane,methyl-		30~40	50~60	108-87-2
Alkanes, C9-C12-iso-		1~5	1~5	90622-57-4

FIRST AID MEASURES

SWALLOWED:

Not applicable

EYE CONTACT:

Immediately flush with plenty of water.

Seek medical advice immediately.

SKIN CONTACT:

Wipe off with dry cloth and wash with mild soap. Seek medical advice immediately.

INHALATION:

Move to well ventilated place. Seek medical advice immediately.

FIRST AID FACILITIES:

No Data

FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

water fog

CO2, dry chemical or foam

Precaution for fire fighters and special protective equipment:

Vapors are flammable, may form explosive mixtures with air. While in use, keep away from heat, sparks or naked flames.

Heating may cause explosion.

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.

HANDLING AND STORAGE

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

Keep tightly capped.

EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROL PARAMETERS:

OSHA PEL (1994)

TWA 500 ppm (2000 mg/m³) [Cyclohexane,methyl-]

ACGIH TLV (2003)

[Cyclohexane,methyl-] TWA 400 ppm

EN LIMIT (2000/39/EN)

Not established

PERSONAL PROTECTION

Not required.

Avoid skin and eye contact.

Do not smoke.

Remove any naked lights or strong heat sources.

ENGINEERING CONTROLS:

Not required.

Maintain concentration below recommended exposure limit.

Use with local exhaust ventilation.

Vapor heavier than air.

Keep stock in a well ventilated area.

Keep tightly capped.

PHYSICAL AND CHEMICAL PROPERTIES (INK)

Appearance

Physical state Liquid

Odor Minor solvent odor Boiling Point / Boiling Range No data available Flash Point -2°C

Explosive Properties Relative Density (g/cm³) No data available

0.9(Silver), 1.2 (Gold) g/cm³

Solubility [Water] insoluble

STABILITY AND REACTIVITY

Keep away from oxidizing agents, peroxides, acids, acid chlorides, acid anhydrides, alkali metals and ammonia.

TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

SWALLOWED:

Not applicable

EYE:

A moderate eye irritant.

May cause watering of eyes.

High concentrations of vapors will cause irritation.

SKIN:

Contact with skin may result in irritation.

Repeated or prolonged skin contact may lead to dermatitic effects.

Will have a degreasing action on the skin.

INHALED:

Toxic by inhalation.

The vapor is an irritant to the mucous membranes and respiratory tract. Inhalation of vapor can result in headaches, dizziness and possible nausea. Possible CNS effects.

CHRONIC EFFECTS:

Possible liver and kidney disorders.

Repeated or prolonged skin contact can cause chronic dermatitis.

Treat symptomatically.

ACUTE TOXICITY (RTECS; 2004.11):

[Cyclohexane,methyl-]

 LD_{50} (rat) >3,200 mg/kg Oral TCL₀ (rat) 82 $mg/m^3/1H$ Inhalation

[Alkanes, C9-C12-iso-]

Oral LD_{50} (rat) >10 mg/kg Inhalation TCL₀ (rat) $>12,200 \text{ mg/m}^3/4\text{H}$ Skin LD₅₀ (rabbit) >3,200 mg/kg

ECOLOGICAL INFORMATION

ECOTOXICITY

BIOACCUMULATIVE POTENTIAL

OTHER ADVERSE EFFECTS

No data available

No data available

DISPOSAL CONSIDERATIONS

Disposal as usual industrial waste goods, follow all regulations in your country. Do not dump this product into sewers , on the ground or into any body of water.

TRANSPORT INFORMATION

Ship Name (CSN):

UN CLASS 3 UN Packing Group (PG) II UN NUMBER 1210

Proper Shipping Name printing ink,flammable

REGULATORY INFORMATION

HAZARD CLASSIFICATION of INGREDIENTS

[Cyclohexane,methyl-] [Alkanes,C9-C12-iso-]		[F,Xn,N]	R:11-38-51/53-65-67 R:10-65-66	S: (2-)9-16-33-61-62 S: (2-)23-24-33-43A-62			
Symbol :	F	(Highly flammable)					
	Xn		(Harmful) (Dangerous for the environment)				
D'al Diagram	N						
Risk Phrase :	10		(Flammable) (Highly flammable)				
	11						
	38		(Irritating to skin)(Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.)(Harmful: may cause lung damage if swallowed.)				
	51/53						
	65	(Harı					
	66		(Repeated exposure may cause skin dryness or cracking.)				
Safety Phrase :	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	(Doı	not breathe gas/fumes/\	/apor/spray.)			
	24		id contact with skin.)				
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		() () ((1212)				

Refer to special instructions/safety data sheets.)

(If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.)

OTHER INFORMATION

REFERENCES:

N.IRVING Sax and RICHARD J. LEWIS,SR, "Dangerous Properties of industrial Materials Seventh Edition", Van Nostrand Reinhold (1989). REGISTRY OF TOXIC EFFECTS IF CHEMICAL SUBSTANCES 1985-86 Edition

Contact Point: Mr. C Watt , Product Manager , Phone(02-9674-0900) Fax (02-9674-0910)

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IMPORTANT ADVICE:

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace.

Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the supplier. Our responsibility for products sold is subject to our standard terms and conditions.