MATERIAL SAFETY DATA SHEET

[MSDS NO.AA1004A-9401]

PRODUCT:

Artline WHITEBOARD MARKER

EK-500A,EK-509A,EK-550A (All colors)

Issue Date Jan.5,2007

Not classified as Hazardous according to criteria of Worksafe Australia

COMPANY DETAILS

JAPAN:

MANUFACTURER/SUPPLIER: Shachihata Inc., Research and Development Department ADDRESS: 4-69,Amazuka-chou,Nishi-ku,Nagoya,451-0021,Japan

TELEPHONE NUMBER: ++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 NUMBER: 02-9674-0900 **FAX NUMBER:** 02-9674-0910

EMERGENCY TELEPHONE: 02-9674-0900 or Mobile:0419-206-163

IDENTIFICATION

Product Name: Artline WHITEBOARD MARKER

Ship Name (CSN): non hazardous

Other Names: -

UN No.: 1210 D.G.CLASS: 3 PACK. GRP: II

HAZCHEM: n/a SUB. RISK: No Data SUSDP: Not Scheduled

PRODUCT USE: Whiteboard marker

PHYSICAL DATA (INK)

APPEARANCE AND ODOUR Liquid, solvent odour.

BOILING POINTNo data available

 $\begin{array}{lll} \textbf{MELTING} & \textbf{POINT} & \textbf{n/a} \\ \textbf{VAPOUR} & \textbf{PRESSURE} & \textbf{n/a} \\ \textbf{VOLATILE (wt.\%)} & 60{\sim}80 \\ \textbf{DENSITY(g/cm3)} & 0.9{\sim}1.0 \\ \end{array}$

FLASH POINT 13 °C(closed cup)

FLAMMABILITY LIMITS no data REL. VAPOUR DENSITY no data SOLUBILITY IN WATER Insoluble

INGREDIENTS (INK)

Chemical or	wt.%		Blue	Orange		CAS(TSCA)	EINECS
 Common Name(s)		Black	Red	Green	Brown	Number	Number
Ethanol		40~50	60~70	60~70	60~70	64-17-5	200-578-6
2-Propanol		30~40	$15 \sim 25$	10~20	20~30	67-63-0	200-661-7
Carbon black		1~ 5				1333-86-4	215-609-9

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

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.

FIRST AID

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

ADVICE TO DOCTOR

Treat symptomatically.

ACUTE TOXICITY (RTECS ; 2002.03):

[Ethanol]

Oral LD_{50} (rat) 7,060 mg/kg Inhalation LC_{50} (rat) 20,000 ppm/10H

[2-Propanol]

Oral LD₅₀ (rat) 5,000 mg/kg Inhalation LC₅₀ (rat) 16,000 ppm/8H

[Carbon black]

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

Inhalation TCL_0 (rat) 50 mg/ m³/6H/90D-I

PRECAUTIONS FOR USE

EXPOSURE CONTROL PARAMETERS:

OSHA PEL (2002)

[Ethanol] TWA 1,000ppm(1,900mg/m3) [2-Propanol] TWA 400ppm(980mg/m3)

[Carbon black] TWA 3.5mg/m3

ACGIH TLV (2002)

[Ethanol] TWA 1,000ppm [2-Propanol] TWA 400ppm [Carbon black] TWA 3.5mg/m3

EN LIMIT (2000/39/EN)

Not established

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.

PERSONAL PROTECTION

Not required.

Avoid skin and eye contact.

Do not smoke.

Remove any naked lights or strong heat sources.

FLAMMABILITY

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

Heating may cause explosion.

ENVIRONMENT:

Not applicable

OTHER PRECAUTIONS:

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

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

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

Keep tightly capped.

SPILLS AND DISPOSAL:

Disposal as usual industrial waste goods, follow all regulations in your country.

FIRE / EXPLOSIUON HAZARD

Extinguish fire with the following:

Use water fog.

Use CO2, dry chemical or foam.

OTHER SAFE HANDLING INFORMATION

PRODUCT: Artline WHITEBOARD MARKER

Page 4 of 4

OTHER INFORMATION

This product is classified as follows and labeled accordingla,

[Ethanol]: [F] R:11 S; (2-)7-16

[2-Propanol]: F,Xi] R:11-36-67 S: (2-)7-16-24/25-26

Symbol: F (Highly Flammable)

Xi (Irritant)

Risk Phrase: 11 (Highly flammable.)

36 (Irritating to eyes.)

67 (Vapours may cause drowsiness and dizziness.)

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

7 (Keep container tightly closed.)

16 (Keep away from sources of ignition – No smoking.)

24/25 (Avoid contact with skin and eyes.)

26 (In case of contact with eyes, rinse immediately with

plenty of water and seek medical advice.)

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

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)

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.