

MATERIAL SAFETY DATA SHEET

[MSDS NO. AA3007B-0710]

PRODUCT :

Artline Eco Green Permanent marker EK-177,EK-199
 (Black)(Blue)(Red)(Green)(Yellow)(Brown)(Orange)
 (Purple)(Yellow Green)(Ochre)(Light Blue)(Pink)
 Artline Eco Green Permanent marker Ink ESK-ND
 (Black)(Blue)(Red)(Green)(Yellow)(Brown)(Orange)
 (Purple)(Yellow Green)(Ochre)(Light Blue)(Pink)

Issue Date 6 May,2011

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
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HAZARDS IDENTIFICATION

Classified as Hazardous according to criteria of Worksafe Australia

[1-Propanol] : [F,Xi] R:11-41-67 S: (2-)-7-16-24-26-39
 [Benzenemethanol] : [Xn] R:20/22 S: (2-)-26

Symbol : F (Highly Flammable)
 Xi (Irritant)
 Xn (Harmful)
 Risk Phrase : 11 (Highly flammable)
 20/22 (Harmful by inhalation and if swallowed)
 41 (Risk of serious damage 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 (Avoid contact with skin.)
 26 (In case of contact with eyes, rinse immediately with
 plenty of water and seek medical advice.)
 39 (Wear eye/face protection.)

IDENTIFICATION

Product Name : Artline Eco Green Permanent marker
 Artline Eco Green Permanent marker Ink
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 : Permanent marker

PHYSICAL DATA (INK)

| | |
|----------------------------------|------------------------|
| APPEARANCE AND ODOUR | Liquid, solvent odour. |
| BOILING POINT | No data available |
| MELTING POINT | n/a |
| VAPOUR PRESSURE | n/a |
| VOLATILE (wt.%) | 70~90 |
| DENSITY(g/cm³) | 0.9~1.0 |
| FLASH POINT | 25 °C(closed cup) |
| FLAMMABILITY LIMITS | no data |
| REL. VAPOUR DENSITY | no data |
| SOLUBILITY IN WATER | Insoluble |

INGREDIENTS (INK)

| Chemical or Common Name(s) | wt.% | Blue ,Green | Ochre, Black,Red | CAS(TSCA) Number | EINECS Number |
|-------------------------------|-------|-------------|---------------------|---------------------|------------------|
| 1-Propanol | 80~90 | | 70~80 | 71-23-8 | 200-746-9 |
| Benzenemethanol | — | | 1~10 | 100-51-6 | 202-859-9 |

| Chemical or Common Name(s) | wt.% | Yellow,Brown,Orange,Purple, Yellow Green,Light Blue,Pink | CAS(TSCA) Number | EINECS Number |
|-------------------------------|-------|---|---------------------|------------------|
| 1-Propanol | 80~90 | | 71-23-8 | 200-746-9 |
| Benzenemethanol | 1~10 | | 100-51-6 | 202-859-9 |

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 ; 2004.11):

[1-Propanol]

| | | |
|------------|------------------------|---------------------------------------|
| Oral | LD ₅₀ (rat) | 1,870 mg/kg |
| Inhalation | LC ₅₀ (rat) | 4,000 ppm/4H |
| | Skin | LD ₅₀ (rabbit) 5,040 mg/kg |

[Benzenemethanol]

| | | |
|------------|---------------------------|------------------------|
| Oral | LD ₅₀ (rat) | 1,230 mg/kg |
| Inhalation | LC ₅₀ (rat) | >500 mg/m ³ |
| Skin | LD ₅₀ (rabbit) | 2,000 mg/kg |

PRECAUTIONS FOR USE**EXPOSURE CONTROL PARAMETERS :**

| | | | |
|-----------------------|--------------|-----|----------------------------------|
| OSHA PEL (1994) | | | |
| | [1-Propanol] | TWA | 200 ppm (500mg/m ³) |
| ACGIH TLV (2003) | | | |
| | [1-Propanol] | TWA | 200 ppm |
| 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 / EXPLOSION HAZARD

Extinguish fire with the following :
 Use water fog.
 Use CO₂, dry chemical or foam.

OTHER SAFE HANDLING INFORMATION**OTHER INFORMATION**

This product is classified as follows and labeled accordingly,

| | | | |
|---------------------|--------|------------|----------------------|
| [1-Propanol] : | [F,Xi] | R:11-41-67 | S: (2-)7-16-24-26-39 |
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| | 39 | (Wear eye/face protection.) |

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.