

# MATERIAL SAFETY DATA SHEET

**PRODUCT :** Artline Opaque Ink Board Marker  
EPD-4  
(All colours)

**Issue Date** 19 May, 2016

## IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name : Artline Opaque Ink Board Marker EPD-4  
Recommended use : Board marker

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

[JAPAN]

MANUFACTURER/SUPPLIER : Shachihata Inc.  
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 : 0423-782-595

## HAZARDS IDENTIFICATION

Classified as Hazardous according to criteria of Worksafe Australia

Substance name : [Ethyl alcohol]  
Classification : F; R11  
R-Phrase : R11 Highly flammable.  
S-Phrase : S2 Keep out of the reach of children.  
S7 Keep container tightly closed.  
S16 Keep away from sources of ignition - No smoking.

Symbols and indications of danger specific F : Highly flammable

Substance name : [Propan-1-ol]  
Classification : F; R11 - Xi; R41 - R67  
R-Phrase : R11 Highly flammable.  
R41 Risk of serious damage to eyes.  
R67 Vapours may cause drowsiness and dizziness.  
S-Phrase : S2 Keep out of the reach of children.  
S7 Keep container tightly closed.  
S16 Keep away from sources of ignition - No smoking.  
S24 Avoid contact with skin.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S39 Wear eye/face protection.

Symbols and indications of danger specific F : Highly flammable Xi : Irritant

Substance name : [Propan-2-ol]  
Classification : F; R11 - Xi; R36 - R67  
R-Phrase : R11 Highly flammable.

S-Phrase : R36 Irritating to eyes.  
 R67 Vapours may cause drowsiness and dizziness.  
 S2 Keep out of the reach of children.  
 S7 Keep container tightly closed.  
 S16 Keep away from sources of ignition - No smoking.  
 S24/25 Avoid contact with skin and eyes.  
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Symbols and indications of danger specific F : Highly flammable Xi : Irritant

Substance name : [Butan-1-ol]

Classification : R10 - Xn; R22 - Xi; R37/38-41 - R67

R-Phrase : R10 Flammable.

R22 Harmful if swallowed.

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

R67 Vapours may cause drowsiness and dizziness.

S-Phrase : S2 Keep out of the reach of children.

S7/9 Keep container tightly closed and in a well-ventilated place.

S13 Keep away from food, drink and animal feedingstuffs.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39 Wear suitable gloves and eye/face protection.

S46 If swallowed, seek medical advice immediately and show this container or label.

Symbols and indications of danger specific Xn : Harmful

## COMPOSITION / INFORMATION ON INGREDIENTS (INK)

Chemical Name / Generic name	Composition weight %			CAS Registry No.
	White	Blue, Yellow	Others	
Ethyl alcohol	45 ~ 55	30 ~ 50	35 ~ 45	64-17-5
Propan-1-ol	10 ~ 20	10 ~ 20	10 ~ 20	71-23-8
Propan-2-ol	—	1 ~ 5	1 ~ 5	67-63-0
Butan-1-ol	1 ~ 10	1 ~ 10	1 ~ 10	71-36-3
Titanium dioxide	5 ~ 15	1 ~ 5	1 ~ 5	13463-67-7

## FIRST AID MEASURES

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Consult a doctor if symptoms persist.

IF ON SKIN : Remove/Take off immediately all contaminated clothing. Wash with soap and water.  
 If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.

IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

IF SWALLOWED : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly. Moreover, do not give anything from the mouth to the patient when not conscious. Receive the doctor's treatment (stomach pump) promptly.

## FIRE FIGHTING MEASURES

### Extinguishing media

Suitable extinguishing media : Dry chemical powder, foam or carbon dioxide

Unsuitable extinguishing media : Water jet

### Special hazards arising from the substance or mixture

For initial stage extinction, carbon dioxide or dry chemical powder.

When a fire extends, fire is extinguished by a large amount of water spray.

Do not discharge extinguishing waters into the aquatic environment.

### Advice for firefighters

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn.

Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

## ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe area. Shut off all sources of ignition.

No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

### Environmental precautions

Do not throw the leakage thing directly into environment

### Methods and material for containment and cleaning up

In case of a small spill, remove by absorbing with absorbents (sawdust, soil, sand, waste cloth, etc.), and then wipe off the waste well with waste cloth, and rag.

In case of large spills, prevent leakage by enclosing with nonflammables (earth and sand, etc.) and collect into empty container by scoop, suction equipment or the like.

## HANDLING AND STORAGE

### Precautions for safe handling

Advice on safe handling : Use with adequate ventilation.

Avoid contact with skin, eyes and clothing.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

Requirements for storage : Keep containers tightly closed and store in a cool and dry place.

areas and containers Keep away from heat and flame, ignition source and sunlight.

Keep out of the reach of children.

## EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### Australian exposure standards(2013)

Ethyl alcohol	TWA	1000ppm
Propan-1-ol	TWA	200ppm
Propan-2-ol	TWA	400ppm
Butan-1-ol	TWA	50ppm
Titanium oxide	TWA	10 mg/m <sup>3</sup>

#### EH40/2005 Workplace exposure limits

Ethyl alcohol	TWA	1000ppm
Propan-1-ol	TWA	200ppm

Propan-2-ol	TWA	400ppm
Butan-1-ol	STEL	50ppm
Titanium oxide	TWA	10 mg/m <sup>3</sup>
ACGIH (2015)		
Ethyl alcohol	STEL	1000ppm
Propan-1-ol	TWA	100ppm
Propan-2-ol	TWA	200ppm
Butan-1-ol	TWA	20ppm
Titanium oxide	TWA	10 mg/m <sup>3</sup>

#### Exposure controls

##### Personal protective equipment

- Respiratory Protection : Use with local exhaust ventilation, when in long use.  
 Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
- Hand Protection : Avoid contact with hands. Wear safety gloves, if necessary.
- Eye Protection : Avoid contact with eyes. Wear safety glasses, if necessary.
- Skin Protection : Avoid skin contact. Wear personal protection apron, boots, if necessary.

##### Environmental exposure controls

- General advice : Prevent product from entering drains.  
 Prevent further leakage or spillage if safe to do so.  
 If the product contaminates rivers and lakes or drains inform respective authorities.

### PHYSICAL AND CHEMICAL PROPERTIES (INK)

Appearance	: liquid
Odour	: minor solvent odour
pH	: Not applicable
Boiling point	: No data available
Flash point	: 17 °C (closed cup)
Relative Density (at 25°C)	: 0.8 ~ 1.0 (g/cm <sup>3</sup> )
Solubility in Water	: Insoluble

### STABILITY AND REACTIVITY

#### Reactivity

No dangerous reaction known under conditions of normal use.

#### Chemical stability

Thermally stable at typical use temperatures.

#### Possibility of hazardous reactions

No data available

#### Conditions to Avoid

High temperature, Direct sunlight, Fire

#### Incompatible Materials

No data available

#### Hazardous decomposition products

CO, CO<sub>2</sub>

## TOXICOLOGICAL INFORMATION

### Information on toxicological effects

Acute toxicity : LD/LC50 values that are relevant for classification

#### [Ethyl alcohol]

Oral-rat LD50 >5,000 mg/kg

Inhalation-rat LC50 >20 mg/L/4h

#### [Propan-1-ol]

Oral-rat LD50 >2,000mg/kg

Dermal-rabbit LD50 >2,000mg/kg

Inhalation-rat LC50 >20 mg/L/4h

#### [Propan-2-ol]

Oral-rat LD50 >5,000mg/kg

Dermal-rabbit LD50 >5,000mg/kg

Inhalation-rat LC50 >20 mg/L/4h

#### [Butan-1-ol]

Oral-rat LD50 >300 - <=2,000 mg/kg

Dermal-rabbit LD50 >2,000mg/kg

Inhalation-rat LC50 >20 mg/L/4h

Carcinogenicity : Titanium dioxide has been classified by the IARC as Group 2B.

Other materials ; Not contain any component that is considered a human carcinogen by IARC, ACGIH, EPA, EU or NTP .

Regarding the carcinogenicity of titanium dioxide, International Agency for Research on Cancer (IARC) has classified as a group 2B. However, ACGIH(American Conference of Governmental Industrial Hygienists) ,EPA(Environmental Protection Agency),EU (European Chemicals Agency), NTP (National Toxicology Program, USA) in the classification of suspected carcinogenic to humans has not been done. Therefore, as the ink product we could not classify the carcinogenicity of GHS from that there is no sufficient data.

## ECOLOGICAL INFORMATION

Ecotoxicity : No data available

Persistence and degradability : No data available

Bioaccumulative potential : No data available

Mobility in soil : No data available

Other adverse effects : No data available

## DISPOSAL CONSIDERATIONS

### Disposal Methods

Disposal must be made according to official regulations.

Comply with all Federal, State, and Local regulations regarding disposal.

Do not allow product to reach ground, any water course or sewage system.

## TRANSPORT INFORMATION

UN number ADG, IMDG, IATA : UN1210

UN proper shipping name ADG, IMDG, IATA : PRINTING INK,flammable

Transport hazard class(es) ADG, IMDG, IATA :  
     • Class 3 (Flammable liquids.)  
     • Label 3

Packing group ADG, IMDG, IATA : II

Environmental hazards Marine pollutant : No

Special precautions for user EMS Number : F-E,S-D



HAZCHEM Code

: 3YE (ADG7)

**REGULATORY INFORMATION**

This product does not contain any hazardous chemical that has been determined by Montreal Protocol (Ozone depleting substances), The Stockholm Convention (Persistent Organic Pollutants), and The Rotterdam Convention (Prior Informed Consent).

**OTHER INFORMATION**

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

This data sheet may not be enough when evaluating danger or hazard. The above information, which is created from currently available documents, information and data, may be revised when new findings are announced. This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency. When handling as a normal product, please refer to the notes that are described in the product or packaging. The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.