MATERIAL SAFETY DATA SHEET

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	MATERIAL SAFETY DATA SHEET				
PRODUCT : Artline Permanent Marker EK-30,EK-50, EK-70,EK-90, EK-100,EK-700, EK-110,EK-120,EK-130 (All colours)					
Issue Date 12 May, 2016					
IDENTIFICATION OF TH	HE MATERIAL AND SUPPLIER				
Product Name Recommended use	: Artline Permanent Marker : Permanent 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 : [Ethanol] Classification : F; R11					
R-Phrase S-Phrase	 R11 Highly flammable. 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 Classification R-Phrase S-Phrase	 [Propan-1-ol] F; R11 - Xi; R41 - R67 R11 Highly flammable. R41 Risk of serious damage 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 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 indicat	ions of danger specific F: Highly flammable Xi: Irritant				
Substance name Classification	: [Ethyl lactate] : R10 - Xi; R37-41				

R-Phrase : R10 Flammable.

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	R37 Irritating to respiratory system.
	R41 Risk of serious damage to eyes.
S-Phrase	: S2 Keep out of the reach of children.
	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 indication	ns of danger specific Xi : Irritant
Substance name	: [Benzyl alcohol]
Classification	: Xn; R20/22
R-Phrase	: R20/22 Harmful by inhalation and if swallowed.
S-Phrase	: S2 Keep out of the reach of children.
	S26 In case of contact with eyes, rinse immediately with plenty of water
	and seek medical advice.
Symbols and indication	ns of danger specific Xn · Harmful

Symbols and indications of danger specific Xn : Harmful

COMPOSITION / INFORMATION ON INGREDIENTS (INK)

Chemical Name /		Composition weight %		
Generic name	Black	Brown,Orange,Yellow	Others	Registry No.
Ethanol	50 ~ 60	50 ~ 60	50 ~ 60	64-17-5
Propan-1-ol	1 ~ 10	_	5 ~ 15	71-23-8
Ethyl lactate	10 ~ 20	20 ~ 30	10 ~ 20	97-64-3
Benzyl alcohol	1 ~ 5	1 ~ 5	1 ~ 5	100-51-6

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 SWALLOWEI	D : 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 Unsuitable extinguishing media	: Dry chemical powder, foam or carbon dioxide : Water jet
	a dioxide or dry chemical powder. uished by a large amount of water spray.
Advice for firefighters In the extinction work, an appropr	aters into the aquatic environment. iate 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			
EH40/2005 Workplace expo	EH40/2005 Workplace exposure limits				
Ethyl alcohol	TWA	1000ppm			
Propan-1-ol	TWA	200ppm			
ACGIH (2015)					
Ethyl alcohol	STEL	1000ppm			
Propan-1-ol	TWA	100ppm			

Exposure controls

Personal protective equipment

	Respiratory Protecti	:	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.
E	nvironmental exposure	эc	controls
	General advice	:	Prevent product from entering drains.

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General advice 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
рН	: Not applicable
Boiling point	: No data available
Flash point	: 16.5 °C (closed cup)
Relative Density (at 25°C)	$: 0.85 \sim 0.95$ (g/cm ³)
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_2

TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity	: LD/LC50 values th	: LD/LC50 values that are relevant for classification		
	[Ethyl alcohol]	[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	
	[Ethyl lactate]			
	Oral-rat	LD50	>2,000mg/kg	
	Dermal-rabbit	LD50	>5,000mg/kg	
	[Benzyl alcohol]			
	Oral-rat	LD50	>300 - <=2,000 mg/kg	
	Inhalation-rat	LC50	>10 - <=20 mg/L/4h	

Carcinogenicity

: Not listed by IARC, EPA, EU, NTP.

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 · Label	: 3 (Flammable liquids.) 3	
Packing group	ADG, IMDG, IATA	: I	
Environmental hazards	Marine pollutant	: No	
Special precautions for user	EMS Number	: F-E,S-D	×
HAZCHEM Code		: 3YE (ADG7)	

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Artline Permanent Marker (EK-30,EK-70,EK-90,EK-700) is not a hazardous material by the special provision. However, Artline Permanent Marker (EK-50,EK-100,EK-110,EK-120,EK-130) is a hazardous material (UN3175) for more than 10ml.

Artline Permanent Marke	er(EK-30,EK-70,EK-90,EK-700)	(Amount of ink : less than 10ml)		
UN number	: UN3175			
UN proper shipping name : Solids containing Flammable Liquid. n.o.s.				
ΙΑΤΑ	Special Provision A46			
IMDG Code	Special Provision 216			
ADG	Special Provision 216			
According to IATA Special Provision A46, and IMDG Code Special Provision 216, small inner packagings consisting of sealed packets and articles containing less than 10 mL of a Class 3 liquid in Packing Group II or III absorbed onto a solid material are not subject to as a hazardous material/dangerous goods provided there is no free liquid in the packet or article.				
Artline Permanent Marke	er (EK-50,EK-100,EK-110,EK-120	0,EK-130) (Amount of ink : over 10ml)		
UN number	: UN3175			
UN proper shipping name : Solids containing Flammable Liquid. n.o.s.				
UN Classification	: 4.1			
Packing group	: I			

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 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 is described in the produce 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.