

**MATERIAL SAFETY DATA SHEET**

[MSDS NO. AA5003B-9401]

**PRODUCT :**  
 Artline DRAWING SYSTEM  
 EK-231,EK-232,EK-233,EK-234,EK-235,EK-238,EK-2305  
 (Black)(Blue)(Red)(Green)

**Issue Date** 6 May,2011

**IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

**Product Name :** Artline DRAWING SYSTEM  
**Other Names :** -  
**Recommended Use :** Writing pen

**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 ILimited  
**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: 0419-206 -163

**HAZARDS IDENTIFICATION**

Classified as Hazardous according to the criteria of Worksafe Australia

[1,2-Ethanediol]	[Xn]	R:22	S: (2)
[Ethanol,2-(2-butoxyethoxy)-]	[Xi]	R:36	S: (2-)24-26

<b>Symbol :</b>	Xj	( Irritant)
	Xn	( Harmful)
<b>Risk Phrase :</b>	22	( Harmful if allowed)
	36	( Irritating to eyes)
<b>Safety Phrase :</b>	2	( Keep out of the reach of children.)
	24	( Avoid contact with skin.)
	26	( In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.)

**COMPOSITION / INFORMATION ON INGREDIENTS (INK)**

&lt;MIXTURE&gt;

Chemical or Common Name(s)	wt. %	Other colors	CAS(TSCA) Number
1,2-Ethanediol	10~20	1~10	107-21-1
Ethanol,2-(2-butoxyethoxy)-	<2	<2	112-34-5
1,2,3-Propanetriol	-	10~20	56-81-5
Carbon	1~10	-	1333-86-4
Water	50~60	50~60	7732-18-5

**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  
CO<sub>2</sub>, 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)			
	[1,2,3-Propanetriol]	TWA	15 mg/m <sup>3</sup>
	[Carbon black]	TWA	3.5 mg/m <sup>3</sup>
ACGIH TLV (2003)			
	[1,2-Ethanediol]	CL	100 mg/m <sup>3</sup> (H)
	[1,2,3-Propanetriol]	TWA	10 mg/m <sup>3</sup>
	[Carbon black]	TWA	3.5 mg/m <sup>3</sup>
EN LIMIT (2000/39/EN)			
	[1,2-Ethanediol]		
	eight hours	20 ppm ( 52 mg/ m <sup>3</sup> )	(skin)
	short-term	40 ppm (104 mg/ m <sup>3</sup> )	(skin)

**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	None
pH	8~10
Boiling Point / Boiling Range	No data available
Flash Point	Not applicable
Explosive Properties	No data available
Relative Density (g/cm <sup>3</sup> )	1.0~1.1 g/cm <sup>3</sup>
Solubility [ Water ]	soluble

**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):**

[1,2-Ethenediol]			
Oral	LD <sub>50</sub> (rat)	4,700	mg/kg
Inhalation	LC <sub>50</sub> (rat)	>200	mg/m <sup>3</sup> /4H
Skin	LD <sub>50</sub> (rabbit)	9,530	uL/kg
[Ethanol,2-(2-butoxyethoxy)-]			
Oral	LD <sub>50</sub> (rat)	5,660	mg/kg
Skin	LD <sub>50</sub> (rabbit)	2,700	mg/kg
[1,2,3-Propanetriol]			
Oral	LD <sub>50</sub> (rat)	12,600	mg/kg
Inhalation	LC <sub>50</sub> (rat)	>570	mg/m <sup>3</sup> /1H

Skin	LD <sub>50</sub> (rabbit)	>10	mg/kg
[Carbon black]			
Oral	LD <sub>50</sub> (rat)	>15,400	mg/kg
Skin	LD <sub>50</sub> (rabbit)	>3	mg/kg

#### ECOLOGICAL INFORMATION

ECOTOXICITY	No data available
BIOACCUMULATIVE POTENTIAL	No data available
OTHER ADVERSE EFFECTS	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	None
UN Packing Group (PG)	None
UN NUMBER	None
Proper Shipping Name	None

#### REGULATORY INFORMATION

##### HAZARD CLASSIFICATION of INGREDIENTS

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#### 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)

##### 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.