

**MATERIAL SAFETY DATA SHEET****1. PRODUCT AND COMPANY IDENTIFICATION**

Product Name                      EK-05   Steel Marker                      (Blue)(Red)

General Use                      Removable marker  
MSDS Number                      EA3042A-0101

**MANUFACTURER**

Company Name                      Shachihata   Co.,Ltd.  
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**2. COMPOSITION / INFORMATION ON INGREDIENTS**

Substance / Mixture                      Mixture

**Hazardous Ingredients**

Chemical or Common Name(s)	wt. %	CAS(TSCA) Number	EINECS Number
Benzen,dimethyl-	40 ~ 50	1330-20-7	215-535-7
1-Butanol	10 ~ 20	71-36-3	200-751-6

EU symbol(s) and risk phrase(s) is specified in 15. REGULATORY INFORMATION.

**3. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

Flammable liquid with a solvent odor.  
May cause allergic skin reaction.

**POTENTIAL HEALTH EFFECT**

No data available

**POTENTIAL ENVIRONMENTAL EFFECTS**

No data available

## **MATERIAL SAFETY DATA SHEET**

### **4. FIRST AID MEASURES**

INHALATION	Move to well ventilated place. See medical advice immediately.
EYE	Immediately flush with plenty of water. See medical advice immediately.
SKIN	Wipe off with dry cloth and wash with mild soap. See medical advice immediately.
INGESTION	See medical advice immediately.
PROTECTION TO FIRST – AIDERS	No data available
NOTE TO PHYSICIAN	Treatment may vary with condition of victim and specifics of incident.

### **5. FIRE FIGHTING MEASURES**

FLAMMABLE PROPERTIES	Flammable
EXTINGUISHING MEDIA	Dry chemical powder, foam or carbon dioxide.
FIRE FIGHTING INSTRUCTIONS	Wear full fire-fighting turn-out gear and respiratory protection.

### **6. 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.

### **7. HANDLING AND STORAGE**

HANDLING :	Use only in the well-ventilated areas. Avoid contact with skin or eyes , or clothing. Avoid inhalation and ingestion. Avoid high temp. and fire. Wash thoroughly after handling.
STORAGE :	Store in a cool, dry, well-ventilated location. Keep away from heat, sunlight. Keep away from children.

**MATERIAL SAFETY DATA SHEET****8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

## EXPOSURE LIMIT VALUES

OSHA	PEL (2002)		
	[Benzen,dimethyl-]	TWA	100 ppm (435mg/m <sup>3</sup> )
	[1-Butanol ]	TWA	100 ppm (300mg/m <sup>3</sup> )
ACGIH	TLV (2002)		
	[Benzen,dimethyl-]	TWA	100 ppm
	[1-Butanol ]	TWA	20 ppm (skin)
EN	LIMIT (2000/39/EN)		
	[Benzen,dimethyl-]		
	eight hours	50 ppm	(221 mg/m <sup>3</sup> ) (skin)
	Short-term	100 ppm	(442 mg/m <sup>3</sup> ) (skin)

## EXPOSURE CONTROLS

## Occupational Exposure Controls

## Engineering Controls

Use exhaust ventilation to keep airborne concentration below exposure limits.

## Personal Protection

## Respiratory Protection

Use with local exhaust ventilation, when in long use.

## Hand Protection

Not required, but wear safety gloves, if necessary.

## Eye Protection

Not required, but wear safety glasses, if necessary.

## Skin Protection

To prevent ANY contact, wear impervious clothing such as gloves, apron, as appropriate.

## Environmental Exposure Controls

Not established

**9. PHYSICAL AND CHEMICAL PROPERTIES**

## Appearance

Physical state	Liquid
Odor	minor solvent odor
Boiling Point / Boiling Range	No data available
Flash Point	22
Explosive Properties	No data available
Relative Density (g/cm <sup>3</sup> )	0.9 ~ 1.0 g/cm <sup>3</sup>
Solubility [ Water ]	Insoluble

## **MATERIAL SAFETY DATA SHEET**

### **10. STABILITY AND REACTIVITY**

CONDITIONS TO AVOID	No data available
STABILITY	No data available
MATERIALS TO AVOID	No data available
HAZARDOUS REACTIONS / DECOMPOSITION PRODUCTS	No data available

### **11. TOXICOLOGICAL INFORMATION**

Acute Toxicity (RTECS : 2002.3)

[Benzen,dimethyl-]			
Oral	LD <sub>50</sub> (rat)	4,300	mg/kg
Inhalation	LC <sub>50</sub> (rat)	5,000	ppm/4H
[1-Butanol ]			
Oral	LD <sub>50</sub> (rat)	790	mg/kg
Inhalation	LC <sub>50</sub> (rat)	8,000	ppm/4H

### **12. ECOLOGICAL INFORMATION**

ECOTOXICITY	No data available
BIOACCUMULATIVE POTENTIAL	No data available
OTHER ADVERSE EFFECTS	No data available

### **13. DISPOSAL CONSIDERATIONS**

Comply with all federal,state,EU,national and local regulations.  
Do not dump this product into sewers , on the ground or into any body of water.

### **14. TRANSPORT INFORMATION**

UN CLASS	3
UN Packing Group (PG)	
UN NUMBER	1210
Proper Shipping Name	Printing ink, flammable

**MATERIAL SAFETY DATA SHEET****15. REGULATORY INFORMATION**

Refer to any other federal , state , EU , national and local regulations.

OSHA STATUS : This product is hazardous under 29 CFR 1910.1200.

TSCA STATUS : All components on TSCA INVENTORY.

CERCLA REPORTABLE QUANTITY (40 CFR 117,302) :  
Not applicable

SARA TITLE : Not applicable

This product is classified as follows ,

[Benzen,dimethyl-]	[Xn]	R:10-20/21-38 S: (2-)25
[1-Butanol ]	[Xn]	R:10-22-37/38-41-67
		S: (2-)7/9-13-26-37/39-46

Symbol : Xn ( Harmful)

Risk Phrase :	10	( Flammable)
	20/21	( Harmful by inhalation and in contact with skin)
	22	( Harmful if swallowed)
	37/38	( Irritating to respiratory system and skin)
	38	( Irritating to skin)
	41	( Risk of serious damage to eyes)
	67	( Vapours may cause drowsiness and dizziness.)
Safety Advice :	2	( Keep out of the reach of children.)
	7/9	( Keep container tightly closed and in a well-ventilated place.)
	13	( Keep away from food , drink and animal feedingstuffs.)
	25	( Avoid contact with eyes.)
	26	( In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.)
	37/39	( Wear suitable gloves and eye/face protection.)
	46	( If swallowed, seek medical advice immediately and show this container or label.)

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

**16. OTHER INFORMATION**

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