

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

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

General Use Removable marker
MSDS Number EA3042B-0101

MANUFACTURER

Company Name Shachihata Inc.
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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

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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.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

OSHA PEL (1994)			
	[Benzen,dimethyl-]	TWA	100 ppm (435mg/m ³)
	[1-Butanol]	TWA	100 ppm (300mg/m ³)
ACGIH TLV (2003)			
	[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 ³) (skin)
	Short-term	100 ppm	(442 mg/m ³) (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	solvent odor
Boiling Point / Boiling Range	No data available
Flash Point	22 °C
Explosive Properties	No data available
Relative Density (g/cm ³)	0.9~1.0 g/cm ³
Solubility [Water]	Insoluble

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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 : 2004.11)

[Benzen,dimethyl-]			
Oral	LD ₅₀ (rat)	4,300	mg/kg
Inhalation	LC ₅₀ (rat)	5,000	ppm/4H
Skin	LD ₅₀ (rat)	>1,700	mg/kg
[1-Butanol]			
Oral	LD ₅₀ (rat)	790	mg/kg
Inhalation	LC ₅₀ (rat)	8,000	ppm/4H
Skin	LD ₅₀ (rat)	3,400	mg/kg

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)	II
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 III: 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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