

To: 王佳
From: 阿霞

FM: BOSCO/SIPA

TO: CAROL LO / ABS ATICO.

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MSDS⁽²⁾

MATERIAL SAFETY DATA SHEET

PRODUCERS
SUPPLIERS
WAREHOUSERS

PERMANENT Marker INK

MI-28-BLK, MI-38-R, MI-58-V, MI-58-G

QUICK IDENTIFIER⁽²⁾

SECTION I - GENERAL INFORMATION

MANUFACTURER NAME: Shanghai University Special Ink R&D Department
411 Guang Yan Rd. Zha Bei District, Shanghai P.R.China
Telephone: 0086-21-56381532
Telefax: 0086-21-56381955

Date: 5-Mar-04 Prepared by Ge Qianhong (Shanghai University Special Ink R&D Department)

SECTION II - HAZARDOUS INGREDIENTS⁽³⁾ (Specify Components)

CAS-no.	substance	conc. range%	classification ⁽³⁾ (EU)
107-21-1	Ethandiol	< 10 %	(Xn, if > 25%)
111-46-6	Diethylene Glycol	< 10 %	(Xn, if > 25%)

ASTM D-4236 Approved: no

Transport Info: UN-NO.: N/A. Prop. Land-carridge Name: Dangerous Goods

IMDG-CODE Class: N/A. MFAG: N/A. EMS NO.: N/A.

ICAO/IATA Class: N/A. Packaging Group: N/A.

SECTION III PHYS./CHEM. CHARACTERISTICS (SPECIFY COMPONENT) /

Appearance: liquid

Odour: typical

Boiling Point (°C): > 75 Density (g/ml): 0.82- 0.87

Vapour Density (Air = 1): > 1 Melting Point (°C): < 0

Solubility in Alcohol: 100 % Evaporation Rate (Butylacetate=1) > 1

Pressurised:	no	X	% Volatile ⁽⁴⁾	97-95
yes				

Other Characteristics: polyhydric alcohol, dyestuffs and additives

SECTION IV - FIRE AND EXPLOSION

Flashp. °C (Method used): > 100	Explosion Limits (Vol%)	LEL n.a.	UEL n.a.
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Extinguishing Media: N/A.

Special Fire Fighting Precautions: cool closed containers exposed to fire with water; do not use waterjet autoignition temperature (°C): N/A.

List of Hazardous Decomp. Products: carbon monoxide and dioxide, smoke, and Oxides of nitrogen after evaporation of water

Other Advice: none

SECTION V - STORAGE HAZARDS

Stability: Unstable: Stable: X **Conditions to Avoid:** avoid heating above 60°C

Incompatibility (Material to avoid): concentrated oxidising or reducing agents

Hazardous Decomposition Products: no hazardous decomposition products known

Hazardous Polymerisation May Occur Will. Not Occur X

Conditions to Avoid: none

SECTION VI - HEALTH HAZARDS

1. Acute⁽⁵⁾ : > 5000 mg/kg⁽¹⁾ 2. Chronic⁽⁵⁾ n.d.

Signs and Symptoms of Overexposure⁽⁵⁾ : n.d.

Medical Cond. Generally Aggravated: n.d.

Chem. Listed as Carcinogens: none of the used chemicals are known to be carcinogens

EMERGENCY AND FIRST AID PROCEDURES

Routes of Entry	First Aid Procedures	Seek Medicial Advice
Inhalation	n.a.	
Eyes	Rinse with plenty of clean and fresh water in case of remaining irritation seek for medical advice	x
Skin	Remove moistened clothing, wash with soap and water, do not use solvents or thinners !!	x
Ingestion	If accidentally swallowed obtain immediate medical attention. Keep at rest Do not induce vomiting	x

SECTION VII - SPECIAL PRECAUTIONS

Special Precautions to Taken in Handling: keep containers tightly closed

Protect drums from the influence of weather

Other Precautions: product should not get untreated into waters

Steps to be taken in Case Material is Release or Spilled: absorb with appropriate liquid binding material and dispose off according to local regulation

Waste Disposal Methods: burn in a licensed incinerator, treat in a biological

Clarification plant; product may not get untreated into waters

SECTION VIII - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection: not necessary, good room ventilation is sufficient

Ventilation: **Local Exhaust:** **Mechanical:** not necessary **Other:**

Skin and Eye Protection: rubber or plastic gloves, protective glasses

Work/Hygienic Practices: pay attention to the usual rules for handling chemicals

Note: The information given in this MSDS is based on our present state of knowledge and is no assurance of properties of our products, Existing laws and regulations have to be obeyed by the purchaser himself. The product shall not be used for purposes other than it is assigned for without the consent of the producer.

Important: (1) Do not leave any blank spaces. If required information is un available, unknown, or does not apply, so indicate as follows:

N/A. = not applicable

n.d. = not determined

n.n. = not necessary

- (9) Product type and common name(used on label and list).
- (10) Cited in any national regulations on the classification, packing and labelling of dangerous substances, preparations, paints, varnishes, printing inks, and similar product.
- (11) Part of the mixture which evaporates
- (12) LD50 Shall be noted if known
- (13) Health hazard by ingestion and inhalation shall be noted if known.
- (14) Calculated from the components
- (15) T - toxic
Xn - harmful if swallowed
Xi - irritant
C - corrosive
F - flammable