

MATERIAL SAFETY DATA SHEET

1. SUBSTANCE IDENTITY AND COMPANY CONTACT INFORMATION

Product name: Ink JP-B27
Manufacturer/distributor: Hitachi America, Ltd.
50 Prospect Avenue, Tarrytown NY 10591
Tel 800-448-2244 Fax 914-631-3672
Emergency phone: CHEMTREC: USA 800-424-9300, Outside USA 703-527-3887

2. COMPOSITION, INFORMATION ON INGREDIENTS

Substance/Mixture Mixture

Chemical name	CAS No.	Composition (%)
Methyl Ethyl Ketone	78-93-3	55-65
Methanol	67-56-1	10-20
Chrome(III)-Complex Dye	TSCA Registered	1-5

3. HAZARD IDENTIFICATION

Appearance and Odor: This product is blue liquid and has an irritant odor

Primary Health Hazards: Irritating to eyes, respiratory system and skin.

Primary Route(s) of Exposure:

Ingestion:

Skin:

Inhalation:

Eye:

Carcinogenicity Listing:

NTP: Not listed

IARC Monographs: Not listed

OSHA Regulated: Not listed

4. FIRST AID MEASURES

Eye contact

Gently rinse the affected eyes with clean water for at least 15 minutes. Remove contact lenses if easily possible. And refer for medical attention.

Skin contact

Remove all contaminated clothing, shoes and socks from the affected areas as quickly as possible. Wash the affected area under running water using a mild soap. If irritation persists, arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

Inhalation

Remove the victim from the contamination immediately to fresh air. Keep the victim warm and quiet and arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

Ingestion

Never give anything by mouth to someone who is unconscious or convulsing. If the victim is responsive, give him one or two glasses of water. And refer for medical attention.

5. FIRE FIGHTING MEASURES

Specific Hazards with regard to fire-fighting measure
 Fight fire from maximum distance.
 Shut off fuel to fire if possible to do so without hazards.
 Extinguishing media
 Dry chemical powder, foam or dioxide.

Flash Point: -5.8° C (Closed cup)
 Boiling Point: 64-80° C.
 Melting Point: No Measurement
 Auto ignition temperature: >470° C.
 Flammable Limits: Upper Limit 11.5% Lower Limit 1.8%

6. ACCIDENTIAL RELEASE MEASURES

Steps to be taken in case material is released or spilled:

Shut off all sources of ignition; No smoking or flames in area. Absorb spill with inert material (e.g., dry sand or earth), then place in closed containers using non-sparking tools. Flush residual spill (area) with copious amounts of water.

7. HANDLING AND STORAGE

Handling

Use only in the well-ventilated areas.
 Make available in the work area emergency shower and eyes wash.
 Avoid contact with skin or eyes.

Storage

Close up the container and keep it in dark cool (0~20°C) place.
 Keep away from combustible materials and sources of ignition.

8. EXPOSURE CONTROL, PERSONAL PROTECTION

Exposure guidelines

Methyl Ethyl Ketone	ACGIH	TLV	TWA	200ppm
			STEL	300ppm
Methanol	OSHA	PEL	TWA	200ppm
			ACGIH	TLV
	OSHA	PEL	TWA	200ppm
			STEL	250ppm

Engineering measure

Use exhaust ventilation to keep airborne concentration below exposure limit.

Personal protective equipment

Respiratory protection	Mask for organic solvent.
Eye protection	Protective glasses. Protective goggles.
Hand protection	Solvent proof gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Blue liquid
Odor	Irritant odor

Density	0.88(20°C)
Boiling point	64-80°C
Melting point	No measurement
Vapor pressure	< 9.4kPa (20°C)
Flash point	-5.8°C (Closed cup)
Auto ignition temperature	Upper than 470°C
Flammable limits	Lower 1.8% Upper 11.5%

10. STABILITY AND REACTIVITY

Stability	The product is stable.
Conditions and materials to avoid	not available
Hazardous decomposition products	these products are carbon oxides

11. TOXICOLOGICAL INFORMATION

Methyl Ethyl Ketone

Acute Toxicity

Eye contact	(human)	350ppm	Irritant properties
Skin contact	(rabbit)	500mg/24h	Moderate irritant properties
Inhalation	TCL0 (human)	100ppm/5min	
Inhalation	LCL0 (rat)	2000ppm/4h	
Oral	LD50 (rat)	4050mg/kg	

Sub-chronic Toxicity

Rats exposed to 2150ppm for 6 weeks showed no adverse effects to nervous system disturbances.

Chronic Toxicity

Rats exposed to 1125ppm for 5 months showed no adverse effects to peripheral nervous system disturbances.

Mutagenic Effects

Sex chromosome loss and no disjunction *S.cerevisiae*, 33,800ppm

Methanol

Acute Toxicity

Oral	LDL0	(human)	340mg/kg
	LDL0	(mouse)	420mg/kg
	LDL0	(dog)	6300mg/kg
	LDL0	(monkey)	7000mg/kg
	LDL0	(rabbit)	4750mg/kg
	TDL0	(human)	100mg/kg
Inhalation	LC50	(monkey)	1000ppm
	TCL0	(human)	300ppm

Chrome (III)-Complex Dye

Mutagenic Effects

Positive in the Ames test

12. ECOLOGICAL INFORMATION

No applicable information was found.

13. DISPOSAL CONSIDERATION

Material may be incinerated. Do not dump into sewer, on the ground or into any body of water.

Follow the applicable, Federal, State, and local regulations. It is the user's responsibility to determine before disposal if the product meets RCRA requirements for a hazardous waste

14. TRANSPORT INFORMATION

Mode: This material is regulated by surface transportation (49 CFR), Air transportation (IATA) and Ocean Transportation (IMDG) and has the same proper shipping description as follows:

Proper Shipping Name: Printing Ink

Hazard Class: 3

ID Number: UN 1210

Packing Group: II

15. REGULATION INFORMATION

TSCA: All chemicals listed on TSCA inventory.

CERCLA: Material does not meet the definition of a reportable quantity in packages shipped.

OSHA:

STATE RIGHT TO KNOW:

California Proposition 65 – This product does not contain any substances currently listed under California Prop. 65.

SARA 313: The following materials are listed in SARA 313: Methyl Ethyl Ketone and Methanol

FDA: Does not meet requirements for direct food contact

16. OTHER INFORMATION

Date of issue March 19,2004

Version 2.00

To the best of our knowledge, the information contained here in is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

HMIS III INFORMATION:

Health: = 1

Fire = 3

Reactivity = 0