

MATERIAL SAFETY DATA SHEET

JP-K84 Printing Ink

THIS MATERIAL SAFETY DATA SHEET CONFORMS TO THE REQUIREMENTS OF ANSI Z400.1.

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (OSHA HAZARD COMMUNICATION STANDARD).

IMPORTANT: READ THIS MSDS BEFORE HANDLING OR DISPOSING OF THIS PRODUCT.

SECTION I - PRODUCT & COMPANY IDENTIFICATION

Hitachi America, Ltd

MANUFACTURER / DISTRIBUTOR 50 Prospect Avenue

Tarrytown, NY 10591

PRODUCT NAME JP-K84 Printing Ink

MATERIAL USES Industrial coding applications; Ink Jet Printers

PRODUCT CODE N/A

Non-Emergency Phone 914-524-6685

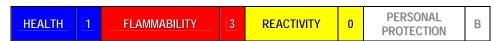
EMERGENCY PHONE CHEMTREC (800) 424-9300

SECTION II - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS#	Percent Range (%)
2-Butanone	78-93-3	80-90
Carbon black	1333-86-4	1-5
Methanol	67-56-1	1-3
2-butoxyethanol	111-76-2	1-3

SECTION III - HAZARDS IDENTIFICATION

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS)



NOTICE: THESE RATINGS ARE FOR GENERAL RAPID INTERPRETATION. THE END-USER IS RESPONSIBLE FOR DETERMINING THE PROPER PROTECTIVE PROCEDURES.

EMERGENCY OVERVIEW **Warning!** Flammable Liquid and Vapor. Skin, Eye and Mucous Membrane Irritant. Do not use near fire or flame. May be fatal or cause blindness if swallowed. Avoid contact with skin, eyes and mucous membranes. If skin contact occurs, wash skin with mild soap and water. If splashed in eyes, flush with water. If inhaled, remove to fresh air. In medical emergency contact Poison Control Center (USA 800.222.1222). Read MSDS before using.





RISK STATEMENTS

R11 Highly Flammable

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed R36 Irritating to eyes, respiratory system and skin

R66 Inhalation of vapors can provoke sleepiness and dizziness

SAFETY STATEMENTS

S2 Keep away from children.S7 Keep container tightly closed

S16 Keep away from sources of ignition - No Smoking!

S25 Avoid contact with eyes

S36/37 Wear suitable protective clothing and gloves

In case of accident or if you feel unwell, seek medical advice immediately (show the label where

possible)

SECTION IV - FIRST AID MEASURES

ORAL INGESTION Do not induce vomiting unless directed to do so by medical personnel. Seek immediate medical attention.

EYE CONTACT Flush with water for 15 minutes and seek medical attention.

SKIN CONTACT Wash with soap and water. Wash contaminated clothing before reuse. Seek immediate medical attention.

INHALATION Remove to fresh air, if not breathing, give artificial respiration and seek medical attention.

SECTION V - FIREFIGHTING MEASURES

EXTINGUISHING MEDIA HAZARDOUS COMBUSTION PRODUCTS

Alcohol Resistant foam or dry chemical Carbon Monoxide, Carbon Dioxide

FIRE FIGHTING PROCEDURES

Wear self-contained breathing apparatus with full facepiece operated in the positive pressure demand mode.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Keep away all sources of ignition from spill. If spill is indoors, ventilate areas of spill and soak up the spill with absorbent material. Do not let spilled or leaking material enter watercourse.

SECTION VII - HANDLING AND STORAGE

HANDLING Avoid contact with eyes. Wash hands thoroughly with soap and water after handling. Utilize proper grounding with containers of material.

Protect from freezing. Overheating may cause container to rupture. Covered storage in a cool, dry place out of direct sunlight is **S**TORAGE

preferable. Keep container tightly sealed until ready for use. Store away from ignition sources.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

If workplace exposure limit(s) of product or any other component is exceeded, a NIOSH/OSHA approved respirator is advised. (See RESPIRATORY PROTECTION

your safety equipment supplier for specific details.)

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below PEL/TLV. VENTILATION

PROTECTIVE GLOVES Wear chemical resistant gloves. (Consult your safety equipment supplier.)

Wear chemical splash goggles in compliance with OSHA regulations. However, OSHA regulations also permit other types of safety EYE PROTECTION

OTHER PROTECTIVE

Wear impervious clothing and boots to prevent prolonged exposure. **FOUIPMENT**

OCCUPATIONAL EXPOSURE LIMITS:

INGREDIENT ACGIH TLV* OSHA PEL* 2-Butanone 200ppm 200ppm

Carbon black 3.5mg/m³

Methanol 200ppm 200ppm

2-butoxyethanol 25ppm

SECTION IX - PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE Liquid Dark COLOR **O**DOR Solvent odor **BOILING RANGE** No measurement MELTING RANGE No measurement

Specific Gravity (Water=1)

DENSITY (lbs / gal) 0.85 - 0.87 (20° C)

EVAPORATION RATE (N-BUTYL ACETATE=1) PERCENT VOLATILE BY VOLUME (%)

> 9.5kPa (20°C) (as 2-**VAPOR PRESSURE**

Butanone) VAPOR DENSITY (AIR=1) Greater than air

FLASH POINT (TCC) -6.6° C (Closed cup) **A**UTO **I**GNITION **T**EMPERATURE > 515° C UPPER FLAMMABLE LIMIT (%By Vol.) 11.5% LOWER FLAMMABLE LIMIT (%By Vol.) 1.8% Miscible SOLUBILITY IN WATER SOLUBILITY IN ORGANIC SOLVENTS Miscible

РΗ Not Applicable

SECTION X - STABILITY & REACIVITY

CONDITION OF INSTABILITY None Known CONDITIONS OF REACTIVITY Not applicable Strong oxidizing agents INCOMPATIBILITY

EXPLOSION DATA (SENSITIVE TO MECHANICAL IMPACT)

No Explosion Data (Sensitive To Static Discharge)

Yes

SECTION XI - TOXICOLOGICAL INFORMATION

Ingredient	Toxicological Information**		
2-Butanone	Eye contact	(human)	350ppm
	Skin contact	(rabbit)	500mg/24h
	Inhalation	TC _{L0} (human)	100ppm/5min
	Inhalation Oral	LC_{L0} (rat) LD_{50} (rat)	2000ppm/4h 4050mg/kg
Methanol	Oral	LD _{L0} (human)	340mg/kg
		LD _{L0} (mouse)	420mg/kg
		LD _{L0} (dog)	6300mg/kg
		LD _{L0} (monkey)	7000mg/kg
		LD _{L0} (rabbit)	4750mg/kg
		TD _{L0} (human)	100mg/kg
	Inhalation	LC ₅₀ (monkey)	1000ppm
		TC _{L0} (human)	300ppm
2-butoxyethanol	Oral	LD ₅₀ (rat)	1746mg/kg 2410mg/kg
	Inhalation	LC ₅₀ (rat)	2.4mg/L/4H
			2.2mg/L/4H
	Skin	LC ₅₀ (rabbit)	99mg/kg
			435mg/kg
			610mg/kg

SECTION XII - ECOLOGICAL INFORMATION

ECOTOXICITY Not Available PERSISTANCE / DEGRADABILITY Not Available

Concentration of cadmium <100ppm; lead, mercury, and hexavalent chromium < 1000

HEAVY METALS mercury, and hexavalent chromium < 1000

ppm

No other ecological information is available for this product.

SECTION XIII - DISPOSAL CONSIDERATIONS

Absorb in vermiculite, floor absorbent or other non-combustible absorbent material and dispose in licensed facility. Observe all federal, state and local regulations.

SECTION XIV - TRANSPORT INFORMATION

DOT / TDG UN Number & Proper Shipping Name UN1210 Printing Ink

DOT/TDG HAZARD CLASS 3

DOT/TDG LABEL FLAMMABLE LIQUID

PACKING GROUP II
EMERGENCY RESPONSE GUIDEBOOK NUMBER 129

SECTION XV - REGULATORY INFORMATION

SARA 313 The following product(s) is (are) listed on SARA 313:

Methanol

California Prop 65 This product contains the following ingredients that the State of California has found to cause cancer, birth defects,

or other reproductive harm, which requires a warning under the statute:

NONE

International Regulations

The components of this product are listed on the chemical inventories of the following countries:

Australia, Canada, Europe (EINECS), Japan, Korea, United Kingdom

SECTION XVI - OTHER INFORMATION

ISSUE DATE 04/2007
REVISION NUMBER 1
SUPERCEDES N/A

Chris Jordan,

PREPARED BY Product

Specialist

DISCLAIMER

Every effort has been made to ensure that the information in this MSDS is accurate and as complete as reasonably possible and of course all data herein are given in good faith. However, all information is furnished without warranty of any kind, and Hitachi America, Ltd. expressly negates any warranty of accuracy, expressed or implied; and Hitachi America, Ltd. assumes no responsibility for personal injury or damage to property to customers, vendors, or third parties if any information herein proves to be incorrect in any respect. Purchasers are encouraged to make independent determination of suitability and completeness of information from all sources to assure proper use and compatibility of product.

*NIOSH Publication #94-116

^{**}Sax's Dangerous Properties of Industrial Mtls. 10th Ed.