

TH-73 Make-Up 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

MANUFACTURER / DISTRIBUTOR Hitachi America, Ltd.
50 Prospect Avenue
Tarrytown, NY 10591

PRODUCT NAME **TH-73 Make-Up 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
Ethanol	64-17-5	1-10
Methanol	67-56-1	1-3
n-Butanol	71-36-3	1-3

SECTION III - HAZARDS IDENTIFICATION

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS)

HEALTH	1	FLAMMABILITY	3	REACTIVITY	0	PERSONAL PROTECTION	B
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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](tel:8002221222)). Read MSDS before using.



F - Highly Flammable



T - Toxic

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
- S45 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

Alcohol Resistant foam or dry chemical

HAZARDOUS COMBUSTION
PRODUCTS

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.

STORAGE Protect from freezing. Overheating may cause container to rupture. Covered storage in a cool, dry place out of direct sunlight is preferable. Keep container tightly sealed until ready for use. Store away from ignition sources.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION If workplace exposure limit(s) of product or any other component is exceeded, a NIOSH/OSHA approved respirator is advised. (See your safety equipment supplier for specific details.)

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

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

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

OTHER PROTECTIVE EQUIPMENT Wear impervious clothing and boots to prevent prolonged exposure.

OCCUPATIONAL EXPOSURE LIMITS:

INGREDIENT	ACGIH TLV*	OSHA PEL*
2-Butanone	200ppm	200ppm
Ethanol	1000ppm	1000ppm
Methanol	200ppm	200ppm
n-Butanol	20ppm	100ppm

SECTION IX - PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid
COLOR	Clear
ODOR	Solvent odor
BOILING RANGE	No measurement
MELTING RANGE	No measurement
SPECIFIC GRAVITY (WATER=1)	----
DENSITY (lbs / gal)	0.80 - 0.81 (20°C)
EVAPORATION RATE (N-BUTYL ACETATE=1)	----
PERCENT VOLATILE BY VOLUME (%)	----
VAPOR PRESSURE	9.5kPa (20°C)
VAPOR DENSITY (AIR=1)	Greater than air
FLASH POINT (TCC)	-8.1°C(Closed cup)
AUTO IGNITION TEMPERATURE	> 515°C
UPPER FLAMMABLE LIMIT (%BY VOL.)	11.5%
LOWER FLAMMABLE LIMIT (%BY VOL.)	1.8%
SOLUBILITY IN WATER	Miscible
SOLUBILITY IN ORGANIC SOLVENTS	Miscible
pH	Not Applicable

SECTION X - STABILITY & REACTIVITY

CONDITION OF INSTABILITY	None Known
CONDITIONS OF REACTIVITY	Not applicable
INCOMPATIBILITY	Strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon Monoxide, Carbon Dioxide
EXPLOSION DATA (SENSITIVE TO MECHANICAL IMPACT)	No
EXPLOSION DATA (SENSITIVE TO STATIC DISCHARGE)	Yes

SECTION XI - TOXICOLOGICAL INFORMATION

INGREDIENT

TOXICOLOGICAL INFORMATION**

Ethanol	Oral	LD ₅₀ (rabbit)	6300mg/kg
		LD ₅₀ (guinea pig)	5560mg/kg
		LD _{L0} (human)	6000mg/kg
		LD _{L0} (mouse)	220mg/kg
		LD _{L0} (dog)	5500mg/kg
		LD _{L0} (cat)	6000mg/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	
n-Butanol	Oral	LD ₅₀ (rat)	790mg/kg
		LD ₅₀ (mouse)	2680mg/kg
	Inhalation	LC _{L0} (rat)	8000ppm/4h
		TC _{L0} (mouse)	25ppm
2-Butanone	Eye contact	(human)	350ppm
	Skin contact	(rabbit)	500mg/24h
	Inhalation	TC _{L0} (human)	100ppm/5min
	Inhalation	LC _{L0} (rat)	2000ppm/4h
	Oral	LD ₅₀ (rat)	4050mg/kg

SECTION XII - ECOLOGICAL INFORMATION

ECOTOXICITY	Not Available
PERSISTANCE / DEGRADABILITY	Not Available
HEAVY METALS	Not Available

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

TSCA	All chemicals used are listed on the TSCA Inventory.
SARA 313	The following product(s) is (are) listed on SARA 313:

Methanol
Ethanol

California Prop 65

This product may contain ingredients that the State of California has found to cause cancer, birth defects, or other reproductive harm, which requires a warning under the statute.

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
PREPARED BY Chris Jordan,
Product
Specialist

DISCLAIMER

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*NIOSH Publication #94-116

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