SECTION I – PRODUCT & COMPANY IDENTIFICATION

Manufacturer: Hitachi America, Ltd.
50 Prospect Avenue
Tarrytown, NY 10591

Product Name: TH-TYPE-A Make-Up Ink

Material Uses: Industrial coding applications; Ink Jet Printers

Product Code: X(01, 19, 21, 22, 45, 53) 0368

Non-Emergency Phone: (936) 856-6600

Emergency Phone: CHEMTREC (800) 424-9300

SECTION II - HAZARDS IDENTIFICATION

Classification according to Directive 1999/45/EC [DPD]

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS)

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>REACTIVITY</th>
<th>PERSONAL PROTECTION</th>
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<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>0</td>
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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). Read MSDS before using.

Exposure Effects and Related Symptoms:

Methyl Ethyl Ketone: Minor embryotoxic/teratogenic effects have been observed in laboratory rats exposed to methyl ethyl ketone by inhalation at levels greater than 1000 ppm (5 times the OSHA PEL/TWA) for most of the gestation period. Methyl ethyl ketone may potentiate (shorten the time of onset) peripheral neuropathy, but methyl ethyl ketone, by itself, has not been shown to cause peripheral neuropathy.

Methanol: Poisoning may occur from ingestion. Other symptoms of over-exposure may be headaches, acidosis, convulsions, mydriasis, circulatory collapse, respiratory failure and death.

Risk Statements:

R11 Highly Flammable
R36/37/38 Irritating to eyes, respiratory system and skin
R46 Repeated exposure may cause skin dryness or cracking
R67 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!
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

SECTION III – COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient: Methyl Ethyl Ketone

<table>
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<tr>
<th>CAS#</th>
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<th>PERCENT RANGE (%)</th>
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<th>TYPE</th>
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<td>78-93-3</td>
<td>201-159-0</td>
<td>60 - 100</td>
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<td>606-002-00-3</td>
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<td></td>
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<td>Flam. Liq 2 – H225 Eye Irrit. 2, H319</td>
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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.

Wash with soap and water. Wash contaminated clothing before reuse. Seek immediate 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 wastewater.

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:**

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<th>Ingredient</th>
<th>ACGIH TLV*</th>
<th>OSHA PEL*</th>
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<tr>
<td>Methanol</td>
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SECTION IX - PHYSICAL & CHEMICAL PROPERTIES

**Physical State**
Liquid

**Color**
Clear

**Odor**
Solvent odor

**Boiling Range**
78 to 80°C

**Melting Range**
~ 80°C

**Specific Gravity (Water = 1)**
0.798

**Density (lbs/gal)**
6.65

**Evaporation Rate (n-Butyl Acetate = 1)**
3.4 to 6

**Percent Volatile by Volume (%)**
100%

**Vapor Pressure**
~ 85 mm of Hg @ 20°C
The components of this product are listed on the chemical inventories of the following countries:
Australia, Canada, Europe (EINECS), Japan, Korea, United Kingdom

REACH (EU) The following chemical(s) have been pre-registered for European Union REACH requirements:
Methyl Ethyl Ketone, Methanol : EU Regulation (EC) No. 1907/2006 (REACH)

SECTION XVI - OTHER INFORMATION

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<td>Garan Myers</td>
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<td>Product Specialist</td>
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CONFORMS TO REGULATION (EC) NO. 1907/2006 (REACH)

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 InkJet, Inc. expressly negates any warranty of accuracy, expressed or implied; and InkJet, Inc. 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. 11th Ed.