

Page: 1

Revision: 08/18/2014 Supersedes Revision: 08/11/2014

1. Product and Company Identification

Product Code: JP-K113
Product Name: JP-K113
Trade Name: JP-K113

Company Name: Hitachi America, Ltd

50 Prospect Ave Tarrytown, NY

Web site address: www.hitachi-america.us/ice/inkjetprinters/

Emergency Contact: Chemtrec

(800)424-9300

2. Hazards Identification

Flammable Liquids, Category 2

Serious Eye Damage/Eye Irritation, Category 2

Acute Toxicity: Oral, Category 5
Acute Toxicity: Inhalation, Category 5
Skin Corrosion/Irritation, Category 2

Target Organ Systemic Toxicity (single exposure), Category 1
Target Organ Systemic Toxicity (single exposure), Category 2
Target Organ Systemic Toxicity (single exposure), Category 3
Target Organ Systemic Toxicity (repeated exposure), Category 1

Aspiration Toxicity, Category 2







GHS Signal Word: Danger

GHS Hazard Phrases: Highly flammable liquid and vapor.

May be harmful if swallowed.
May be harmful if inhaled.
Causes skin irritation.
Causes damage to organs
May cause damage to organs.
May cause respiratory irritation.

Causes serious eye irritation.

Causes damage to organs through prolonged or repeated exposure.

May be harmful if swallowed and enters airways.

GHS Precaution Phrases: Keep container tightly closed.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear protective gloves/protective clothing/eye protection/face protection.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/.../ equipment.

Take precautionary measures against static discharge.

Use only non-sparking tools.

Wash hands thoroughly after handling.

Take off contaminated clothing and wash it before reuse.

Do not breathe dust/fume/gas/mist/vapours/spray.
Do not eat, drink or smoke when using this product.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Use only outdoors or in a well-ventilated area.

GHS Response Phrases: In case of fire, use dry chemical, CO2, water splay, fog or form to extinguish.



Page: 2

Supersedes Revision: 08/11/2014

Revision: 08/18/2014

IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

If eye irritation persists, get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Specific treatment see Section 4 on this label. If skin irritation occurs, get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

Get medical attention/advice if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Do NOT induce vomiting.

GHS Storage and Disposal

Phrases:

Store in cool/well-ventilated place. Dispose of contents/container listed in 40 CFR Parts 261.

Store locked up.

Store container tightly closed in well-ventilated place - if product is as volatile as to

generate hazardous atmosphere.

Hazard Rating System:





HMIS:

Potential Health Effects (Acute and Chronic):

Chronic: Chronic inhalation may cause effects similar to those of acute inhalation. Prolonged or repeated skin contact may cause defatting and dermatitis. Animal studies have reported that fetal effects/abnormalities may occur when maternal toxicity is seen.

Chronic overexposure to vapors may cause lung damage.

Causes respiratory tract irritation. Inhalation of vapors may cause drowsiness and Inhalation:

> dizziness. May cause central nervous system effects such as nausea and headache. Neurobehavioural effects of exposure to MEK (200 ppm for 4 hrs) were studied with 137 volunteers. There were no statistically significant effects observed in biochemical,

psychomotor, sensorimotor and psychological tests.

Skin Contact: May be absorbed through the skin in harmful amounts. Repeated or prolonged exposure

> may cause drying and cracking of the skin. Only one human case of skin sensitization was located. Negative results were obtained in an animal test; MEK did not produce skin

sensitization in the mouse ear thickness test.

Eye Contact: Causes eye irritation. Vapors may cause eye irritation. Animal evidence suggests that

MEK is a moderate to severe eye irritant.

May cause irritation of the digestive tract. Possible aspiration hazard. May cause central Ingestion:

nervous system depression. Animal evidence suggests that MEK can be aspirated

(inhaled) into the lungs during ingestion or vomiting.

3. Composition/Information on Ingredients

CAS# **Hazardous Components (Chemical Name)** Concentration 78-93-3 75.0 -85.0 % Methyl ethyl ketone NA Proprietary chrome complex 1.0 -10.0 %



Page: 3

Revision: 08/18/2014 Supersedes Revision: 08/11/2014

4. First Aid Measures

Emergency and First Aid

Procedures:

No data available.

In Case of Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical aid.

In case of contact, flush skin with plenty of water. Remove contaminated clothing and In Case of Skin Contact:

shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. In Case of Eye Contact:

Get medical aid.

Potential for aspiration if swallowed. Get medical aid immediately. Do not induce In Case of Ingestion:

vomiting unless directed to do so by medical personnel. Never give anything by mouth to

an unconscious person. If vomiting occurs naturally, have victim lean forward.

Treat symptomatically and supportively. Note to Physician:

5. Fire Fighting Measures

Flash Pt: -5.00 C (23.0 F)

UEL: No data. LEL: No data. **Explosive Limits:**

505.00 C (941.0 F) **Autoignition Pt:**

Suitable Extinguishing Media: In case of fire, use carbon dioxide, dry chemical powder or appropriate foam. Water may

be ineffective because it will not cool material below its flash point.

As in any fire, wear a self-contained breathing apparatus in pressure-demand, Fire Fighting Instructions:

> MSHA/NIOSH (approved or equivalent), and full protective gear. Extremely flammable liquid and vapor. Vapor may cause flash fire. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in

low or confined areas.

Flammable Properties and

Hazards:

No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or

Spilled:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide

ventilation.

7. Handling and Storage

Precautions To Be Taken in Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Use only with adequate ventilation. Avoid breathing vapor.

Precautions To Be Taken in

Storing:

Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from

incompatible substances. Flammables-area.

8. Exposure Controls/Personal Protection

Licensed to Hitachi Ink Research and Development: MIRS MSDS, (c) A V Systems, Inc.

GHS format



Page: 4

Revision: 08/18/2014

Supersedes Revision: 08/11/2014 CAS# **ACGIH TWA Partial Chemical Name OSHA TWA Other Limits** 78-93-3 PEL: 200 ppm TLV: 200 ppm No data. Methyl ethyl ketone STEL: 300 ppm No data. No data. NA Proprietary chrome complex No data.

Respiratory Equipment

(Specify Type):

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved

respirator if exposure limits are exceeded or if irritation or other symptoms are

experienced.

Wear chemical splash goggles. **Eye Protection:**

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.):

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Ventilation fans and other

electrical service must be non-sparking and have an explosion-proof design.

9. Physical and Chemical Properties

[X]Liquid [] Solid **Physical States:** [] Gas

Appearance and Odor: Black.

solvent odor.

Melting Point: -87.00 C (-124.6 F) **Boiling Point:** 80.00 C (176.0 F) Autoignition Pt: 505.00 C (941.0 F) Flash Pt: -5.00 C (23.0 F)

UEL: No data. **Explosive Limits:** LEL: No data.

Specific Gravity (Water = 1): No data. 0.8050 G/ML Density:

Vapor Pressure (vs. Air or

mm Hg):

No data.

No data. Vapor Density (vs. Air = 1): **Evaporation Rate:** No data. Solubility in Water: No data. Percent Volatile: No data.

10. Stability and Reactivity

Unstable [] Stable [X] Stability: **Conditions To Avoid** ignition sources, Excess heat.

Instability:

Incompatibility - Materials To Strong oxidizing agents, Strong acids, 2-propanol.

Avoid:

Hazardous Decomposition Or Carbon monoxide, Carbon dioxide.

Byproducts:

Possibility of Hazardous

Will not occur [X] Will occur []

Reactions:

Conditions To Avoid -No data available.

Hazardous Reactions:



Page: 5

Revision: 08/18/2014 Supersedes Revision: 08/11/2014

11. Toxicological Information

Toxicological Information: No data available.

Carcinogenicity/Other CAS# 78-93-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Information:

CAS# **Hazardous Components (Chemical Name) NTP IARC ACGIH OSHA** 78-93-3 Methyl ethyl ketone n.a. n.a. n.a. n.a. NA Proprietary chrome complex n.a. n.a. n.a. n.a.

12. Ecological Information

General Ecological Information:

Environmental: Substance evaporates in water with T1/2=3D (rivers) to 12D (lakes). Substance is not expected to bioconcentrate in marine life. Physical: Substance photodegrades in air with T1/2=2.3 days. Oxidizes rapidly by photo-chemical reactions in air. Readily biodegradable meeting the 10 day window criterion. Not expected to bioaccumulate significantly.

13. Disposal Considerations

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified

as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series:

CAS# 78-93-3: waste number U159 (Ignitable waste, Toxic waste).

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Printing ink

DOT Hazard Class: 3 FLAMMABLE LIQUID

UN/NA Number: UN1210 Packing Group: II



LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Printing ink

UN Number: 1210 Packing Group: ||

Hazard Class: 3 - FLAMMABLE LIQUID TDG Classification:

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name:

UN Number: 1210 Packing Group: II

Hazard Class: 3 - FLAMMABLE LIQUID

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Printing ink



Page: 6

Revision: 08/18/2014 Supersedes Revision: 08/11/2014

S. 313 (TRI)

T5. Regulatory Information EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists CAS # Hazardous Components (Chemical Name) S. 302 (EHS)

78-93-3 Methyl ethyl ketone No Yes 5000 LB No NA Proprietary chrome complex No No No No

This material meets the EPA [X] Yes [] No Acute (immediate) Health Hazard **'Hazard Categories' defined** [X] Yes [] No Chronic (delayed) Health Hazard

for SARA Title III Sections [X] Yes [] No Fire Hazard

311/312 as indicated: [] Yes [X] No Sudden Release of Pressure Hazard

[] Yes [X] No Reactive Hazard

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists

78-93-3 Methyl ethyl ketone TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8:

TAC, Title 8; NC TAP: Yes

NA Proprietary chrome complex TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; NC TAP:

No

CAS # Hazardous Components (Chemical Name) International Regulatory Lists

78-93-3 Methyl ethyl ketone Canadian DSL: Yes; Canadian NDSL: No; Mexico INSQ: Yes -

1193; Australia ICS: Yes; New Zealand IOC: Yes; Japan ENCS: Yes - (2)-542; Japan ISHL: No; Israel HSL: No; Germany WHCS: Yes - 150; Switzerland Giftliste 1: Yes - G-2429; Switzerland INNS: No; REACH: Yes - (R), (P)

S. 304 RQ

NA Proprietary chrome complex Canadian DSL: No; Canadian NDSL: No; Mexico INSQ: No;

Australia ICS: No; New Zealand IOC: No; Japan ENCS: No; Japan ISHL: No; Israel HSL: No; Germany WHCS: No; Switzerland Giftliste 1: No; Switzerland INNS: No; REACH:

Yes - (P)

16. Other Information

Revision Date: 08/18/2014

Additional Information About To the best of our knowledge, the information contained here in is accurate. However,

This Product: 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.

Hitachi Contact Information:

Garan Myers

Phone (866) 583 0048