

1. Product and Company Identification

Product Code: JP-K72u
Product Name: JP-K72u
Trade Name: JP-K72u
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: H225: Highly flammable liquid and vapor.
H319: Causes serious eye irritation.
H303: May be harmful if swallowed.
H333: May be harmful if inhaled.
H315: Causes skin irritation.
H370: Causes damage to organs.
H371: May cause damage to organs.
H335: May cause respiratory irritation.
H372: Causes damage to organs through prolonged or repeated exposure.
H305: May be harmful if swallowed and enters airways.

GHS Precaution Phrases: P233: Keep container tightly closed.
P210: Keep away from {heat/sparks/open flames/hot surfaces}. - No smoking.
P280: Wear {protective gloves/protective clothing/eye protection/face protection}.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting equipment.
P243: Take precautionary measures against static discharge.
P242: Use only non-sparking tools.
P264: Wash {hands} thoroughly after handling.
P260: Do not breathe {dust/fume/gas/mist/vapours/spray}.
P270: Do not eat, drink or smoke when using this product.
P261: Avoid breathing {dust/fume/gas/mist/vapours/spray}.
P271: Use only outdoors or in a well-ventilated area.

GHS Response Phrases: P370+378: In case of fire, use dry chemical, CO₂, water splay, fog or foam to extinguish.
P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated

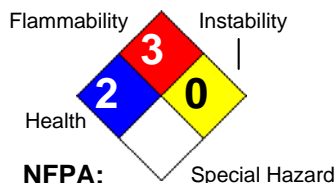
clothing. Rinse skin with water/shower.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313: If eye irritation persists, get medical advice/attention.
P312: Call a {POISON CENTER/doctor} if you feel unwell.
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P321: Specific treatment {see Section 4 on this SDS}.
P332+313: If skin irritation occurs, get medical advice/attention.
P362: Take off contaminated clothing.
P307+311: IF exposed: Call a POISON CENTER or doctor/physician.
P309+311: Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P314: Get medical attention/advice if you feel unwell.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331: Do NOT induce vomiting.

GHS Storage and Disposal Phrases:

P403+235: Store in cool/well-ventilated place.
P501: Dispose of contents/container listed in 40 CFR Parts 261.
P405: Store locked up.
P403+233: Store container tightly closed in well-ventilated place - if product is as volatile as to generate hazardous atmosphere.

Hazard Rating System:

| | | |
|---------------------|----------|----------|
| HEALTH | | 2 |
| FLAMMABILITY | | 3 |
| PHYSICAL | | 0 |
| PPE | B | |



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.

Inhalation:

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

Ingestion:

May cause irritation of the digestive tract. Possible aspiration hazard. May cause central 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 | Methyl ethyl ketone | 80.0 -90.0 % |
| NA | Proprietary chrome complex | 1.0 -10.0 % |

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 Skin Contact: | In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse. |
| In Case of Eye Contact: | In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid. |
| In Case of Ingestion: | Potential for aspiration if swallowed. Get medical aid immediately. Do not induce 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. |
| Note to Physician: | Treat symptomatically and supportively. |

5. Fire Fighting Measures

| | |
|--|--|
| Flash Pt: | -7.60 C (18.3 F) Method Used: Closed Cup |
| Explosive Limits: | LEL: No data. UEL: No data. |
| Autoignition Pt: | 505.00 C (941.0 F) |
| 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. |
| Fire Fighting Instructions: | As in any fire, wear a self-contained breathing apparatus in pressure-demand, 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

| CAS # | Partial Chemical Name | OSHA TWA | ACGIH TWA | Other Limits |
|---------|----------------------------|--------------|-------------------------------|--------------|
| 78-93-3 | Methyl ethyl ketone | PEL: 200 ppm | TLV: 200 ppm STEL: 300 ppm | No data. |
| NA | Proprietary chrome complex | No data. | No data. | 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.

Eye Protection: Wear chemical splash goggles.

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

Physical States: [] Gas [X] Liquid [] Solid
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: -7.60 C (18.3 F) Method Used: Closed Cup
Explosive Limits: LEL: No data. UEL: No data.
Specific Gravity (Water = 1): No data.
Density: 0.8050 G/ML
Vapor Pressure (vs. Air or mm Hg): No data.
Vapor Density (vs. Air = 1): No data.
Evaporation Rate: No data.
Solubility in Water: No data.
Percent Volatile: No data.

10. Stability and Reactivity

Stability: Unstable [] Stable [X]
Conditions To Avoid - Instability: ignition sources, Excess heat, confined spaces.
Incompatibility - Materials To Avoid: Strong oxidizing agents, Strong acids.
Hazardous Decomposition Or Byproducts: Carbon monoxide, Carbon dioxide, Peroxides.
Possibility of Hazardous Reactions: Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions: No data available.

11. Toxicological Information

Toxicological Information: No data available.
Carcinogenicity/Other Information: CAS# 78-93-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

| 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.
 Other: No information available.

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

DOT Proper Shipping Name: Printing ink
DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: UN1210 **Packing Group:** II



15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

| CAS # | Hazardous Components (Chemical Name) | S. 302 (EHS) | S. 304 RQ | S. 313 (TRI) |
|---------|--------------------------------------|--------------|-------------|--------------|
| 78-93-3 | Methyl ethyl ketone | No | Yes 5000 LB | No |
| NA | Proprietary chrome complex | No | No | No |

This material meets the EPA Yes No Acute (immediate) Health Hazard
'Hazard Categories' defined Yes No Chronic (delayed) Health Hazard
for SARA Title III Sections Yes No Fire Hazard
311/312 as indicated: Yes No Sudden Release of Pressure Hazard
 Yes 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: Yes - Inventory; 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; |

NA Proprietary chrome complex

Germany WHCS: Yes - 150; Switzerland Giffliste 1: Yes - G-2429; Switzerland INNS: No; REACH: Yes - (R), (P)
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 Giffliste 1: No; Switzerland INNS: No; REACH: Yes - (P)

16. Other Information

Revision Date: 08/18/2014

Additional Information About This Product: 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.

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