

1. Product and Company Identification

Product Code: JP-K87
Product Name: JP-K87
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
Acute Toxicity: Oral, Category 5
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2
Specific Target Organ Toxicity (single exposure), Category 1
Specific Target Organ Toxicity (single exposure), Category 2
Specific Target Organ Toxicity (single exposure), Category 3
Specific Target Organ 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 swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
Causes damage to organs
May cause damage to organs .
Causes damage to organs through prolonged or repeated exposure.

GHS Precaution Phrases: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water.
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

	<p>present and easy to do. Continue rinsing. IF exposed: Call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if exposed or you feel unwell. Call a POISON CENTER or doctor/physician if you feel unwell. Get medical attention/advice if you feel unwell. Specific treatment see section 4 on this label. Do NOT induce vomiting. If skin irritation occurs, get medical advice/attention. If eye irritation persists, get medical advice/attention. Take off contaminated clothing and wash before re-use.</p>
GHS Storage and Disposal Phrases:	<p>Store in cool/well-ventilated place. Store locked up. Dispose of contents/container listed in 40 CFR Parts 261.</p>
Potential Health Effects (Acute and Chronic):	<p>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.</p>
Inhalation:	<p>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.</p>
Skin Contact:	<p>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.</p>
Eye Contact:	<p>Causes eye irritation. Vapors may cause eye irritation. Animal evidence suggests that MEK is a moderate to severe eye irritant.</p>
Ingestion:	<p>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.</p>

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:

- 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:** -8.20 C (17.2 F) Method Used: Closed Cup
- Explosive Limits:** LEL: 1.4 vol% at 93.0 C (199.4 F) UEL: 11.4 vol at 93.0 C (199.4 F)
- 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:**

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	
NA	Proprietary chrome complex			
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)			
Decomposition Temperature:	NA			
Autoignition Pt:	505.00 C (941.0 F)			
Flash Pt:	-8.20 C (17.2 F) Method Used: Closed Cup			
Explosive Limits:	LEL: 1.4 vol% at 93.0 C (199.4 F) UEL: 11.4 vol at 93.0 C (199.4 F)			
Specific Gravity (Water = 1):				
Density:	0.8050 G/ML			
Vapor Pressure (vs. Air or mm Hg):	77.5 MM_HG at 20.0 C (68.0 F)			
Vapor Density (vs. Air = 1):	2.41 (air=1)			
Evaporation Rate:	3.7 (nBuAc=1)			
Solubility in Water:	Soluble.			
Viscosity:	0.41 CP at 20.0 C (68.0 F)			
pH:	NA			
Percent Volatile:				
Molecular Formula & Weight:	C4H8O 72.11			

10. Stability and Reactivity

Stability:	Unstable [] Stable [X]		
Conditions To Avoid - Instability:	ignition sources, Excess heat.		
Incompatibility - Materials To Avoid:	Strong oxidizing agents, Strong acids, 2-propanol.		
Hazardous Decomposition Or Byproducts:	Carbon monoxide, Carbon dioxide.		
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]		
Conditions To Avoid -			

Hazardous Reactions:

11. Toxicological Information

Toxicological Information:

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.

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



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; 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)
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)

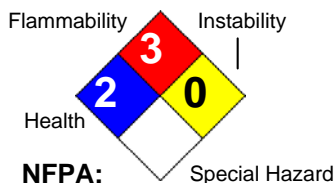
16. Other Information

Revision Date: 02/17/2015

Hazard Rating System:

HEALTH	<input type="checkbox"/>	2
FLAMMABILITY	<input type="checkbox"/>	3
PHYSICAL	<input type="checkbox"/>	0
PPE	B	

HMIS:



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.

Hitachi Contact Information:
 Garan Myers
 Phone (866) 583-0048