

1. Product and Company Identification

Product Name:	JP-K87, 1087K	
Company Name:	Hitachi Industrial Equipment & Solutions America, LLC 2730 Greenleaf Avenue Elk Grove Village, IL 60007	Phone Number: (866)583-0048
Web site address:	http://www.hitachi-america.us/ice/markings-and-coding	
Emergency Contact:	Chemtrec	(800)424-9300
Information:	Christian Krzykwa	(980)500-7144
Intended Use:	Printing ink	

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

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

GHS Response Phrases: P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352 - IF ON SKIN: Wash with plenty of soap and water.
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 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.
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 P314 - Get medical attention/advice if you feel unwell.
 P321 - Specific treatment see ... on this label.
 P331 - Do NOT induce vomiting.
 P332+313 - If skin irritation occurs, get medical advice/attention.
 P337+313 - If eye irritation persists, get medical advice/attention.
 P362 - Take off contaminated clothing and wash before re-use.
 P403+235 - Store in cool/well-ventilated place.
 P405 - Store locked up.
 P501 - Dispose of contents/container ...

GHS Storage and Disposal Phrases:

Emergency Overview:

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
NA	Proprietary chrome complex	1.0 -10.0 %
67-66-3	Chloroform	< 0.1 %
78-93-3	Methyl ethyl ketone	80.0 -90.0 %

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Get medical aid.

In Case of Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Thoroughly wash or discard clothing and shoes before reuse. 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 with eyes, flush with copious amounts of water for at least 15 minutes. Get medical aid.

In Case of Ingestion: Potential for aspiration if swallowed. If vomiting occurs naturally, have victim lean forward. 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.

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.

Unsuitable Extinguishing Media: Water may be ineffective because it will not cool material below its flash point.

Fire Fighting Instructions: Extremely flammable liquid and vapor. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. 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:

Hazardous Combustion Products:

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: 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. Use proper personal protective equipment as indicated in Section 8.

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 in a dry and well-ventilated place. Keep away from heat, sparks, and open 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: Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Keep away from sources of ignition.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	Proprietary chrome complex			
67-66-3	Chloroform	CEIL: 50 ppm	TLV: 10 ppm	
78-93-3	Methyl ethyl ketone	PEL: 200 ppm	TLV: 200 ppm STEL: 300 ppm	

Respiratory Equipment (Specify Type):	Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.
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.):	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. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. Physical and Chemical Properties

Physical States:	<input type="checkbox"/> Gas <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Solid
Appearance and Odor:	Black. solvent odor.
pH:	NA
Melting Point:	-87.00 C (-124.6 F)
Boiling Point:	80.00 C (176.0 F)
Flash Pt:	-8.20 C (17.2 F) Method Used: Closed Cup
Evaporation Rate:	3.7 (nBuAc=1)
Flammability (solid, gas):	
Explosive Limits:	LEL: 1.4 vol% at 93.0 C (199.4 F) UEL: 11.4 vol at 93.0 C (199.4 F)
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)
Specific Gravity (Water = 1):	
Density:	0.8050 g/mL
Solubility in Water:	Soluble.
Octanol/Water Partition Coefficient:	
Autoignition Pt:	505.00 C (941.0 F)
Decomposition Temperature:	NA
Viscosity:	0.41 CP at 20.0 C (68.0 F)

10. Stability and Reactivity

Stability:	Unstable <input type="checkbox"/> Stable <input checked="" type="checkbox"/>
Conditions To Avoid - Instability:	
Incompatibility - Materials To Avoid:	
Hazardous Decomposition or Byproducts:	
Possibility of Hazardous Reactions:	Will occur <input type="checkbox"/> Will not occur <input checked="" type="checkbox"/>
Conditions To Avoid - Hazardous Reactions:	

11. Toxicological Information

Toxicological Information:

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
NA	Proprietary chrome complex	n.a.	n.a.	n.a.	n.a.
67-66-3	Chloroform	Possible	2B	A3	n.a.
78-93-3	Methyl ethyl ketone	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 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA U-Series: RCRA P-Series: None listed.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or reducing compound), flammable]
DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: UN1210 **Packing Group:** II



LAND TRANSPORT (Canadian TDG):

TDG Shipping Name:
UN Number: 1210 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID **TDG Classification:**

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Chloroform. mixture.

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)
NA	Proprietary chrome complex	No	No	No
67-66-3	Chloroform	Yes 10000 LB	Yes 10 LB	Yes
78-93-3	Methyl ethyl ketone	No	Yes 5000 LB	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Explosive	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Acute toxicity (any route of exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Flammable (gases, aerosols, liquid, or solid)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Skin Corrosion or Irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Oxidizer (liquid, solid or gas)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Serious eye damage or eye irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-reactive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Respiratory or Skin Sensitization
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric (liquid or solid)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Germ cell mutagenicity

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Carcinogenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-heating	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Reproductive toxicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Organic peroxide	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Specific target organ toxicity (single or repeated exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Corrosive to metal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Aspiration Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Gas under pressure (compressed gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Simple Asphyxiant
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	In contact with water emits flammable gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Health) Hazard Not Otherwise Classified (HNOC)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Combustible Dust		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Physical) Hazard Not Otherwise Classified (HNOC)		

CAS #	Hazardous Components (Chemical Name)	Canadian NPRI	Canadian Toxic	Canadian DSL
NA	Proprietary chrome complex	No	No	No
67-66-3	Chloroform	Yes: Part 1A	No	Yes
78-93-3	Methyl ethyl ketone	Yes: Part 5	No	Yes

California Proposition 65



WARNING

This product can expose you to chemicals including Chloroform, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
NA	Proprietary chrome complex	TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; NC TAP: No
67-66-3	Chloroform	TSCA: Yes - Inventory, 8A CAIR; CA PROP.65: Yes: Canc+RDTox.; CA TAC, Title 8: TAC: Cat. IIa, Title 8; NC TAP: Yes: NC TAP
78-93-3	Methyl ethyl ketone	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC: Cat. IIa, Title 8; NC TAP: Yes: NC TAP

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
NA	Proprietary chrome complex	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); Rotterdam: No
67-66-3	Chloroform	Mexico INSQ: Yes - 1888; Australia ICS: Yes; New Zealand IOC: Yes; Japan ENCS: Yes - 2-37; Japan ISHL: No; Israel HSL: No; Germany WHCS: Yes - 54: WGK 3; Switzerland Giffliste 1: Yes - G-1411; Switzerland INNS: No; REACH: Yes - 01-2119486657-20: Full, (P); Rotterdam: No
78-93-3	Methyl ethyl ketone	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: WGK 1; Switzerland Giffliste 1: Yes - G-2429; Switzerland INNS: No; REACH: Yes - 01-2119457290-43: Full, (P); Rotterdam: No

Canadian WHMIS Classification:

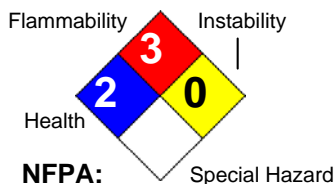
16. Other Information

Revision Date: 09/04/2018

Hazard Rating System:

HEALTH	2
FLAMMABILITY	3
PHYSICAL	0
PPE	B

HMIS:



Additional Information About

This Product:

Company Policy or

Disclaimer:

To the best of our knowledge, the information contained herein 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 presented in this document. Final determination of suitability of any material is the sole responsibility of the user to follow local, state and federal laws and regulations in regards to handling of hazardous materials. Although certain hazards are described herein, unknown hazards may exist and caution should always be exercised.

Hitachi Contact Information:

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