

1. Product and Company Identification

Product Name: JP-K81A, 2081K
Company Name: Hitachi Industrial Equipment & Solutions America, LLC
2730 Greenleaf Avenue
Elk Grove Village, IL 60007
Phone Number: (866)583-0048
Web site address: <https://www.hitachi-iesa.com/industrial-marking-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
Serious Eye Damage/Eye Irritation, Category 2A
Acute Toxicity: Oral, Category 5
Acute Toxicity: Inhalation, Category 5
Skin Corrosion/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.
H319 - Causes serious eye irritation.
H302 - Harmful if swallowed.
H332 - Harmful if inhaled.
H315 - Causes skin irritation.
Causes respiratory irritation.
H370 - Causes damage to organs kidneys
H372 - Causes damage to organs central and peripheral nervous systems through prolonged or repeated exposure.

GHS Precautionary Phrases: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
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 vapours.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.

GHS Response Phrases:	P370+378 - In case of fire, use dry chemical, CO2, water spray, or foam to extinguish. P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P302 - IF ON SKIN: P352 - Wash with plenty of soap and water/take off contaminated clothing and wash it before reuse. 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. P332+313 - If skin irritation occurs, get medical advice/attention. P307+311 - IF exposed: Call a POISON CENTER or doctor/physician. P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P301 - IF SWALLOWED: P311 - Call a POISON CENTER or doctor/physician. P331 - Do NOT induce vomiting.
GHS Storage and Disposal Phrases:	P401 - Store in a well-ventilated place. Keep Cool. P501 - Dispose of contents/container in accordance with local regulations. P405 - Store locked up.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
67-64-1	Acetone	50.0 -70.0 %
64-17-5	Ethyl alcohol	5.0 -15.0 %
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:	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Wash clothing before reuse. Remove contaminated clothing and shoes. If skin irritation or rash occurs, seek medical advice/attention.
In Case of Eye Contact:	In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. If eye irritation persists, get medical advice/attention.
In Case of Ingestion:	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Potential for aspiration if swallowed. Do not induce vomiting unless directed to do so by medical personnel.
Note to Physician:	Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Pt:	-17.00 C (1.4 F) Method Used: TAG Closed Cup
Explosive Limits:	LEL: 1.2 UEL: 13
Autoignition Pt:	~ 465.00 C (869.0 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	No data available.

Hazards:

Hazardous Combustion No data available.

Products:

6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Use explosion-proof equipment. Ensure adequate ventilation. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Steps To Be Taken In Case Material Is Released Or Spilled: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

7. Handling and Storage

Precautions To Be Taken in Handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Take measures to prevent the build up of electrostatic charge.

Precautions To Be Taken in Storing: Keep container tightly closed in a cool, dry, and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
67-64-1	Acetone	PEL: 1000 ppm	No data.	No data.
64-17-5	Ethyl alcohol	PEL: 1000 ppm	No data.	No data.
NA	Proprietary chrome complex	No data.	No data.	No data.

Personal Protective Equipment Symbols:



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 and clothing to prevent skin exposure.

Other Protective Clothing: No data available.

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.
Ketone odor.

pH: No data.

Melting Point: -94.00 C (-137.2 F) - 137.00 C (278.6 F)

Boiling Point: 56.00 C (132.8 F)

Flash Pt: -17.00 C (1.4 F) Method Used: TAG Closed Cup

Evaporation Rate: No data.

Flammability (solid, gas):	Keep away from sources of ignition - No smoking.
Explosive Limits:	LEL: 1.2 UEL: 13
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Specific Gravity (Water = 1):	~ 0.86
Density:	~ 0.79 G/CM3
Solubility in Water:	No data.
Saturated Vapor Concentration:	No data.
Octanol/Water Partition Coefficient:	No data.
Autoignition Pt:	~ 465.00 C (869.0 F)
Decomposition Temperature:	No data.
Viscosity:	No data.

Information with regard to primary physical hazard:

10. Stability and Reactivity

Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	Ignition sources. Excess heat. Confined spaces. Exposure to moist air or water.
Incompatibility - Materials To Avoid:	Strong oxidizing agents, Alkali metals, Ammonia, Peroxides.
Hazardous Decomposition or Byproducts:	Carbon oxides.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information:

CAS# 67-64-1:

1. Acute toxicity, TDLo, Oral, Human, 2857. MG/KG.

Result:

Behavioral: Coma.

Kidney, Ureter, Bladder: Other changes.

- "Toxicology of Drugs and Chemicals", Deichmann, W.B., Academic Press, Inc., New York, Vol/p/yr: -,64, 1969

2. Standard Draize Test, Eyes, Human, 500.0 PPM.

Result:

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.

Gastrointestinal: Tumors.

Liver: Tumors.

- Journal of Industrial Hygiene and Toxicology, Vol/p/yr: 25,282, 1943

3. Standard Draize Test, Skin, Species: Rabbit, 500.0 MG, 24 H.

Result:

Gastrointestinal: Gastritis.

Liver: Hepatitis (hepatocellular necrosis), diffuse.

Kidney, Ureter, Bladder: Interstitial nephritis.

- Prehled Prumyslove Toxikologie, Marhold, J., Organicke Latky, Prague Czechoslovakia, Vol/p/yr: -,280, 1986

4. Standard Draize Test, Eyes, Human, 186300. ppm, Mild.

Result:

Gastrointestinal: Alteration in gastric secretion.

Gastrointestinal: Other changes.

- CRC Critical Reviews in Toxicology., CRC Press, Inc., 2000 Corporate Blvd., NW, Boca Raton, FL 33421, Vol/p/yr: 32,43, 2002

CAS# 64-17-5:

1. Acute toxicity, TDLo, Oral, Human, 3371. UL/KG.

Result:

Behavioral: Altered sleep time (including change in righting reflex).

Behavioral: Excitement.

Behavioral: Coma.

- Veterinary and Human Toxicology., American College of Veterinary and Comparative Toxicology, Publication Office, Comparative Toxicology, Manhattan, KS 66506, Vol/p/yr: 21,272, 1979

2. Acute toxicity, TDLo, Oral, Human, 700.0 MG/KG.

Result:

Behavioral: Changes in psychophysiological tests.

- Neurobehavioral Toxicology and Teratology., For publisher information, see NETEEC, Fayetteville, NY, Vol/p/yr: 8,77, 1986

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
67-64-1	Acetone	n.a.	n.a.	Unknown	n.a.
64-17-5	Ethyl alcohol	n.a.	1	Unknown	n.a.
NA	Proprietary chrome complex	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

No data available.

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Bioaccumulative Potential: No bioaccumulation is to be expected .

13. Disposal Considerations

Waste Disposal Method: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dispose of contents/container in accordance with local/regional/national and international regulations.

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: UN1210 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID **TDG Classification:**

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Printing ink.
UN Number: UN1210 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Printing ink.
UN Number: UN1210 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Printing ink.
UN Number: UN1210 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID

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)
67-64-1	Acetone	No	Yes NA	No
64-17-5	Ethyl alcohol	No	No	No
NA	Proprietary chrome complex	No	No	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 checked="" type="checkbox"/> Yes <input 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)

67-64-1	Acetone
64-17-5	Ethyl alcohol
NA	Proprietary chrome complex

Other US EPA or State Lists

TSCA: Inventory
CA TAC, Title 8: Title 8

TSCA: Inventory
CA TAC, Title 8: Title 8

CAS # Hazardous Components (Chemical Name)

67-64-1	Acetone
64-17-5	Ethyl alcohol
NA	Proprietary chrome complex

International Regulatory Lists

Japan ENCS: 2-542
Germany WHCS: 6: WGK 1
Switzerland Giftliste 1: G-1031
REACH: 01-2119471330-49: Full, (P)

Japan ENCS: 5-153
Israel HSL: Cat.
Germany WHCS: 96: WGK 1
Switzerland Giftliste 1: G-1158
REACH: 01-2119457610-43: Full, (P)

REACH: (P)

16. Other Information

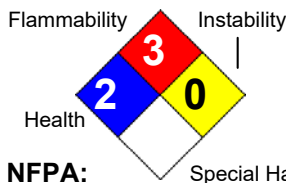
Revision Date: 08/02/2023

Previous revision: 08/02/2023

Hazard Rating System:

HEALTH	2
FLAMMABILITY	3
PHYSICAL	0
PPE	B

HMIS:



Additional Information About This Product: 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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