

1. Product and Company Identification

Product Name: JP-K415ci, 2415Kci
Company Name: Hitachi Industrial Equipment & Solutions America, LLC
Phone Number: (800)627-5464
 75 NW Point Blvd Suite D,
 Elk Grove Village, IL 60007
Web site address: <https://mc.hitachi-iesa.com>
Emergency Contact: Chemtrec (800)424-9300

Intended Use: Printing ink for industrial inkjet printers.

2. Hazards Identification

Flammable Liquids, Category 2
Serious Eye Damage/Eye Irritation, Category 2
Specific Target Organ Toxicity (single exposure), Category 3
Toxic To Reproduction, Category 1B
Acute Toxicity: Inhalation, Category 4
Acute Toxicity: Oral, Category 4



GHS Signal Word:

Danger

GHS Hazard Phrases:

H225 - Highly flammable liquid and vapor.
 H302+332 - Harmful if swallowed or if inhaled.
 H319 - Causes serious eye irritation.
 H336 - May cause drowsiness or dizziness.
 H360 - May damage fertility or the unborn child .
 H318 - Causes serious eye damage.
 H371 - May cause damage to organs .
 H335 - May cause respiratory irritation.

GHS Precautionary Phrases:

P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P233 - Keep container tightly closed.
 P240 - Ground/bond container and receiving equipment.
 P241 - Use explosion-proof electrical/ventilating/lighting/printing equipment.
 P242 - Use only non-sparking tools.
 P243 - Take precautionary measures against static discharge.
 P261 - Avoid breathing 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.
 P273 - Avoid release to the environment.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P281 - Use personal protective equipment as required.
 P235 - Keep cool.

GHS Response Phrases:

P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P331 - Do NOT induce vomiting.
 P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 P302+352 - IF ON SKIN: Wash with plenty of soap and water.
 P363 - Wash contaminated clothing before reuse.
 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.
 P308+313 - IF exposed or concerned: Get medical attention/advice.
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 P330 - Rinse mouth.
 P337+313 - If eye irritation persists, get medical advice/attention.
 P332+313 - If skin irritation occurs, get medical advice/attention.
 P370+378 - In case of fire, use dry sand, dry chemical or alcohol-resistant foam to extinguish.
 P321 - Specific treatment (see supplementary first aid instructions on this label).
 P403+233 - Store container tightly closed in well-ventilated place.
 P405 - Store locked up.
 P501 - Dispose of contents/container in accordance with local regulations.

GHS Storage and Disposal Phrases:

Other Hazards:

Potential Health Effects (Acute and Chronic):

Inhalation:

Skin Contact:

Eye Contact:

Ingestion:

Harmful to aquatic life with long lasting effects.
 Hazards not otherwise classified (HNOC) or not covered by GHS. Hazards not otherwise classified (HNOC) or not covered by GHS -none.
 Inhalation of vapors may cause drowsiness and dizziness. May cause central nervous system effects such as nausea and headache. May cause respiratory irritation.
 Repeated exposure may cause skin dryness or cracking. May be absorbed through the skin in harmful amounts.
 Causes eye irritation. Vapors may cause eye irritation.
 May cause irritation of the digestive tract. Possible aspiration hazard. May cause central nervous system depression.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
67-64-1	Acetone	70.0 -80.0 %
616-38-6	Dimethyl carbonate	1.0 -10.0 %
NA	Proprietary Ingredient (Chrome (III) Complex)	< 5.0 %

4. First Aid Measures

Emergency and First Aid Procedures:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
In Case of Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. If breathing is difficult, give oxygen. If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.
In Case of Skin Contact:	Wash off with soap and plenty of water. Consult a physician. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical aid if irritation develops and persists.
In Case of Eye Contact:	Get medical aid. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If eye irritation persists, get medical advice/attention.
In Case of Ingestion:	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. If vomiting occurs naturally, have victim lean forward.
Signs and Symptoms Of Exposure:	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed:	No data available.
Note to Physician:	Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Point:	-17.00 C (1.4 F)
Explosive Limits:	LEL: 2.5 UEL: 12.8
Autoignition Pt:	N.D.
Suitable Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. Water may be ineffective.
Unsuitable Extinguishing Media:	Do not use water jet.
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:	Flash back possible over considerable distance. Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions.
Hazardous Combustion Products:	Carbon oxides.

6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures:	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.
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). Use nonsparking tools. Shut off all sources of ignition. Evacuate area.

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. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2. Wash thoroughly after handling. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous.
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. Storage class (TRGS 510): Flammable liquids Keep container closed. Keep away from heat, sparks and flame. Store away from incompatible substances.
Other Precautions:	Apart from the uses mentioned in section 1 no other specific uses are stipulated.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
67-64-1	Acetone	PEL: 1000 ppm	TLV: 250 ppm STEL: 500 ppm	No data.
616-38-6	Dimethyl carbonate	No data.	No data.	No data.
NA	Proprietary Ingredient (Chrome (III) Complex)	No data.	No data.	No data.

Personal Protective Equipment Symbols:



Respiratory Equipment (Specify Type):	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye Protection:	Wear chemical splash goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses with side-shields conforming to EN166.
Protective Gloves:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wear appropriate protective gloves to prevent skin exposure. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. If used in solution, or mixed with other substances, and under conditions which differ from EN 0.3, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers.
Other Protective Clothing:	Impervious clothing. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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.
Work/Hygienic/Maintenance Practices:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Environmental Exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Controls: Discharge into the environment must be avoided.

9. Physical and Chemical Properties

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

Appearance and Odor: colorless.
solvent odor.
Odor Threshold: Not Determined

pH: < 7

Melting Point: N.D.

Boiling Point: ~ 55.00 C (131.0 F)

Flash Point: -17.00 C (1.4 F)

Evaporation Rate: Not determined

Flammability (solid, gas): No data available.

Explosive Limits: LEL: 2.5 UEL: 12.8

Vapor Pressure: Not determined

Not determined

Vapor Density (vs. Air=1): Not determined

Specific Gravity (Water=1): ~ 0.85

Density: Not determined

Solubility in Water: No data.

Solubility Notes: No data available.

Saturated Vapor Concentration: No data.

Octanol/Water Partition Coefficient: Not determined

Autoignition Pt: N.D.

Decomposition Temperature: N.D.

Viscosity: ~ 3

Explosive Properties: No data available.

Information on other hazards: No data available.

10. Stability and Reactivity

Reactivity: No data available.

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability: Heat, flames and sparks. Extremes of temperature and direct sunlight. Moisture.

Incompatibility - Materials To Avoid: Strong oxidizing agents, Strong reducing agents.

Hazardous Decomposition or Byproducts: No data available.

Byproducts: In the event of fire: see section 5.

Possibility of Hazardous Will occur [] Will not occur [X]

Reactions:**Conditions To Avoid -** No data available.**Hazardous Reactions:****11. Toxicological Information****Toxicological Information:**

Germ cell mutagenicity: No data available.

Reproductive toxicity. Aspiration hazard: Acute toxicity.

Chromosome aberration test in vitro. Cell Type: lymphocyte.

Result: negative.

Reproductive toxicity - rat - Oral. male and female. No toxicity to reproduction.

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

Irritation or Corrosion:

Skin corrosion/irritation. Provide adequate ventilation.

Result: Tumorigenic:Tumors at site or application. Mild eye irritation -24. Serious eye damage/eye irritation: Eyes - rabbit -

Skin: Rabbit.

Result: No skin irritation . (OECD Test Guideline 404) Eyes.

Sensitization:

Guinea pig 88%, 4

Result: Tumorigenic:Tumors at site or application. Freund's complete adjuvant test:

Species: Guinea pig. Result: negative.

Chronic Toxicological Effects:

Specific target organ toxicity - single exposure: May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure: No data available.

Specific target organ toxicity -repeated exposure: no data available.

Carcinogenicity/Other Information:

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. No data available. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
67-64-1	Acetone	n.a.	n.a.	Unknown	n.a.
616-38-6	Dimethyl carbonate	n.a.	n.a.	n.a.	n.a.
NA	Proprietary Ingredient (Chrome (III) Complex)	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

Results of PBT and vPvB assessment:	No data available. PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Persistence and Degradability:	Biodegradability Result: 91 % -Readily biodegradable. - Readily biodegradable. Biodegradability aerobic -Exposure time 28 d Result: 86 % -Readily biodegradable.
Bioaccumulative Potential:	Does not bioaccumulate. No data available.
Mobility in Soil:	No data available.
Other adverse effects:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life. No data available.

13. Disposal Considerations

Waste Disposal Method:	Product: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Contaminated packaging: Observe all federal, state, and local environmental regulations. Dispose of as unused product.
-------------------------------	---

14. Transport Information

LAND TRANSPORT (US DOT):

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



LAND TRANSPORT (Canadian TDG):

TDG Shipping Name:	Printing ink.	Packing Group:	II
UN Number:	UN1210	TDG Classification:	
Hazard Class:	3 - FLAMMABLE LIQUID		

LAND TRANSPORT (European ADR/RID):

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

MARINE TRANSPORT (IMDG/IMO):

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

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name:	Printing ink.	Packing Group:	II
UN Number:	UN1210		
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
616-38-6	Dimethyl carbonate	No	No	No
NA	Proprietary Ingredient (Chrome (III) Complex)	No	No	Yes-Cat. N090

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 type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> Yes <input 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 type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> Yes <input 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)		

California Proposition 65

WARNING

This product can expose you to chemicals including Toluene, which is known to the State of California to cause 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
67-64-1	Acetone	TSCA: Inventory CA TAC, Title 8: Title 8
616-38-6	Dimethyl carbonate	TSCA: Inventory
NA	Proprietary Ingredient (Chrome (III) Complex)	TSCA: Inventory CA TAC, Title 8: TAC - Cat., Title 8 - Cat. NC TAP: Yes - Cat.

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
67-64-1	Acetone	Japan ENCS: 2-542 Germany WHCS: 6: WGK 1

Revision: 09/13/2024
Supersedes Revision: 05/02/2023

616-38-6 Dimethyl carbonate

Switzerland Giftliste 1: G-1031
REACH: (P), 01-2119471330-49: Full
Mexico INSQ: 1161
Japan ENCS: 2-2853
Germany WHCS: 4077: WGK 1
Switzerland Giftliste 1: G-5966
REACH: (P), 01-2119548399-23: Full
Israel HSL: Cat.
Germany WHCS: : WGK 2
REACH: (P), (R): Full

NA Proprietary Ingredient (Chrome (III) Complex)

16. Other Information

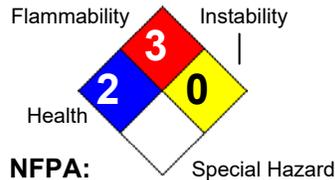
Revision Date: 09/13/2024

Previous revision: 05/02/2023

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.