

1. Product and Company Identification

Product Name: JP-K408ci, 2408Kci
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 1
Acute Toxicity: Inhalation, Category 4
Specific Target Organ Toxicity (single exposure), Category 3
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.
 H318 - Causes serious eye damage.
 H319 - Causes serious eye irritation.
 H335 - May cause respiratory irritation.
 H336 - May cause drowsiness or dizziness.
 H371 - May cause damage to organs .

GHS Precautionary Phrases: P201 - Obtain special instructions before use.
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P202 - Do not handle until all safety precautions have been read and understood.
 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.
 P235 - Keep cool.

GHS Response Phrases: P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 P331 - Do NOT induce vomiting.

P302+352 - IF ON SKIN: Wash with plenty of soap and water.
 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.
 P310 - Immediately call a POISON CENTER or doctor/physician.
 P330 - Rinse mouth.
 P332+313 - If skin irritation occurs, get medical advice/attention.
 P337+313 - If eye irritation persists, get medical advice/attention.
 P370+378 - In case of fire, use water spray, dry chemical, carbon dioxide, or alcohol resistant foam to extinguish.
 P363 - Wash contaminated clothing before reuse.

GHS Storage and Disposal Phrases:

P403+233 - Store container tightly closed in well-ventilated place.
 P405 - Store locked up.
 P501 - Dispose of contents/container in accordance with local regulations.

Other Hazards:

Causes mild skin irritation. Harmful to aquatic life with long lasting effects.

Inhalation:

Inhalation of vapors may cause drowsiness and dizziness. May cause central nervous system effects such as nausea and headache. Causes respiratory tract irritation.

Skin Contact:

Repeated exposure may cause skin dryness or cracking. May be absorbed through the skin in harmful amounts.

Eye Contact:

Causes eye irritation. Vapors may cause eye irritation.

Ingestion:

Possible aspiration hazard. May cause central nervous system depression. May cause irritation of the digestive tract.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
67-64-1	Acetone	70.0 -80.0 %
64-17-5	Ethyl alcohol	< 5.0 %
2530-83-8	3-Glycidoxypropyltrimethoxysilane	< 5.0 %
4197-25-5	2,3-Dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenyl azo)]azo]-1H-perimidine	< 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 INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing give artificial respiration. Consult a physician. Get medical aid. If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.

In Case of Skin Contact:

In case of contact, flush skin with plenty of water. Wash off with soap and 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:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. If eye irritation persists, get medical advice/attention.

In Case of Ingestion:

Do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

Note to Physician:

Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Point:	-20.00 C (-4.0 F) Method Used: TAG Closed Cup
Explosive Limits:	LEL: 2.5%vol UEL: 12.8%vol
Autoignition Pt:	N.D.
Suitable Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. In case of fire, use carbon dioxide, dry chemical powder or appropriate 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. Container explosion may occur under fire conditions.
Hazardous Combustion Products:	Carbon oxides, Nitrogen 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. For personal protection see section 8.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided.
Steps To Be Taken In Case Material Is Released Or Spilled:	Shut off all sources of ignition. 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. Evacuate area. Vapours can accumulate in low areas. Beware of vapours accumulating to form explosive concentrations.

7. Handling and Storage

Precautions To Be Taken in Handling:	Use only with adequate ventilation. 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 skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Keep away from heat, sparks and flame. Take measures to prevent the build up of electrostatic charge. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. For precautions see section 2.2.
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. Hygroscopic. Storage class (TRGS 510) Keep away from sources of ignition. Store away from oxidizers.
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	No data.	No data.
64-17-5	Ethyl alcohol	PEL: 1000 ppm	No data.	No data.

Revision: 08/09/2024
 Supersedes Revision: 08/06/2024

2530-83-8	3-Glycidoxypropyltrimethoxysilane	No data.	No data.	No data.
4197-25-5	2,3-Dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenylazo)]azo]-1H-perimidine	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. 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:

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Wear chemical splash goggles. Safety glasses with side-shields conforming to EN166.

Protective Gloves:

Handle with gloves. Wear appropriate gloves to prevent skin exposure. 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. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Splash contact: Material: butyl-rubber Minimum layer thickness: 3 mm Break through time: 292 min.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, 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. It should not be construed as offering an approval for any specific use scenario.

Other Protective Clothing:

Wear appropriate protective clothing to prevent skin exposure. 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.

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.

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 Controls:

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

9. Physical and Chemical Properties

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

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

pH: < 7

Melting Point: N.D.

Boiling Point:	~ 55.00 C (131.0 F)
Flash Point:	-20.00 C (-4.0 F) TAG Closed Cup
Evaporation Rate:	No data.
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: 2.5%vol UEL: 12.8%vol
Vapor Pressure:	Not determined Not determined
Vapor Density (vs. Air=1):	Not determined
Specific Gravity (Water=1):	.875 at 25.0 C (77.0 F)
Density:	Not determined
Solubility in Water:	Not determined
Solubility Notes:	No data available.
Saturated Vapor Concentration:	No data.
Octanol/Water Partition Coefficient:	Not determined
VOC / Volume:	ND 0.0000
HAP / Volume:	ND 0.0000
Autoignition Pt:	N.D.
Decomposition Temperature:	N.D.
Viscosity:	~ 3 cP

10. Stability and Reactivity

Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	Exposure to moisture. Heat, flames and sparks. Ignition sources.
Incompatibility - Materials To Avoid:	Oxidizing agents, Strong reducing agents.
Hazardous Decomposition or Byproducts:	In the event of fire: see section 5. No data available.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information:	<p>Acute toxicity.</p> <p>Germ cell mutagenicity: No data available.</p> <p>Reproductive toxicity.</p> <p>CAS# 67-64-1:</p> <p>1. Acute toxicity, TDLo, Oral, Human, 2857. MG/KG.</p> <p>Result:</p> <p>Behavioral: Coma.</p> <p>Kidney, Ureter, Bladder:Other changes.</p> <p>- "Toxicology of Drugs and Chemicals", Deichmann, W.B., Academic Press, Inc., New York, Vol/p/yr: -,64, 1969</p> <p>2. Standard Draize Test, Eyes, Human, 500.0 PPM.</p> <p>Result:</p> <p>Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.</p> <p>Gastrointestinal:Tumors.</p> <p>Liver: Tumors.</p> <p>- Journal of Industrial Hygiene and Toxicology, Vol/p/yr: 25,282, 1943</p> <p>3. Standard Draize Test, Skin, Species: Rabbit, 500.0 MG, 24 H.</p> <p>Result:</p> <p>Gastrointestinal:Gastritis.</p> <p>Liver: Hepatitis (hepatocellular necrosis), diffuse.</p> <p>Kidney, Ureter, Bladder:Interstitial nephritis.</p> <p>- Prehled Prumyslove Toxikologie, Marhold, J., Organicke Latky, Prague Czechoslovakia, Vol/p/yr: -,280, 1986</p> <p>4. Standard Draize Test, Eyes, Human, 186300. ppm, Mild.</p> <p>Result:</p> <p>Gastrointestinal: Alteration in gastric secretion.</p> <p>Gastrointestinal:Other changes.</p> <p>- CRC Critical Reviews in Toxicology., CRC Press, Inc., 2000 Corporate Blvd., NW, Boca Raton, FL 33421, Vol/p/yr: 32,43, 2002</p> <p>CAS# 64-17-5:</p> <p>1. Acute toxicity, TDLo, Oral, Human, 3371. UL/KG.</p> <p>Result:</p> <p>Behavioral: Altered sleep time (including change in righting reflex).</p> <p>Behavioral: Excitement.</p> <p>Behavioral: Coma.</p> <p>- Veterinary and Human Toxicology., American College of Veterinary and Comparative Toxicology, Publication Office, Comparative Toxicology, Manhattan, KS 66506, Vol/p/yr: 21,272, 1979</p> <p>2. Acute toxicity, TDLo, Oral, Human, 700.0 MG/KG.</p> <p>Result:</p> <p>Behavioral: Changes in psychophysiological tests.</p> <p>- Neurobehavioral Toxicology and Teratology., For publisher information, see NETEEC, Fayetteville, NY, Vol/p/yr: 8,77, 1986</p>
Irritation or Corrosion:	<p>Skin corrosion/irritation. Result: Tumorigenic:Tumors at site or application. No skin irritation OECD Test Guideline 404. Serious eye damage/eye irritation: Eyes - rabbit -</p>
Chronic Toxicological	<p>Specific target organ toxicity - single exposure:</p>

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

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.
2530-83-8	3-Glycidoxypropyltrimethoxysilane	n.a.	n.a.	n.a.	n.a.
4197-25-5	2,3-Dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenylazo)]azo]-1H-perimidine	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

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.

DOT Hazard Class: 3

FLAMMABLE LIQUID

UN/NA Number: UN1210

UN1210

Packing Group:

II



LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Printing ink.

UN Number: UN1210

UN1210

Packing Group:

II

Hazard Class: 3 - FLAMMABLE LIQUID

3 - FLAMMABLE LIQUID

TDG Classification:

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Printing ink.

UN Number: UN1210

UN1210

Packing Group:

II

Hazard Class: 3 - FLAMMABLE LIQUID

3 - FLAMMABLE LIQUID



MARINE TRANSPORT (IMDG/IMO):

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

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
64-17-5	Ethyl alcohol	No	No	No
2530-83-8	3-Glycidoxypropyltrimethoxysilane	No	No	No
4197-25-5	2,3-Dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenyl azo)]azo]-1H-perimidine	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 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 Ethylbenzene, which is known to the State of California to cause cancer. 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
64-17-5	Ethyl alcohol	TSCA: Inventory CA TAC, Title 8: Title 8
2530-83-8	3-Glycidoxypropyltrimethoxysilane	TSCA: Inventory, 8A
4197-25-5	2,3-Dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenyl azo)]azo]-1H-perimidine	TSCA: Inventory

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
67-64-1	Acetone	Japan ENCS: 2-542 Germany WHCS: 6: WGK 1 Switzerland Giftliste 1: G-1031

64-17-5	Ethyl alcohol	REACH: (P), 01-2119471330-49: Full Japan ENCS: 5-153 Israel HSL: Cat. Germany WHCS: 96: WGK 1 Switzerland Giftliste 1: G-1158
2530-83-8	3-Glycidoxypropyltrimethoxysilane	REACH: (P), 01-2119457610-43: Full Japan ENCS: 2-2962 Germany WHCS: 2622: WGK 2
4197-25-5	2,3-Dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenylazo)]azo]-1H-perimidine	REACH: (P), 01-2119513212-58: Full Japan ENCS: 5-3141 REACH: (P)

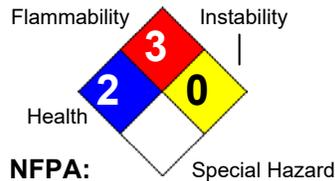
16. Other Information

Revision Date: 08/09/2024 **Previous revision:** 08/06/2024

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.