

This SDS complies with the US OSHA HCS 2024.

## 1. Product and Company Identification

**Product Name:** S4425ci  
**Trade Name:** S4425ci  
**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 related material for industrial inkjet printers.

## 2. Hazards Identification

Flammable Liquids, Category 2

Acute Toxicity: Oral, Category 4

Serious Eye Damage/Eye Irritation, Category 2A



**GHS Signal Word:**

**Danger**

**GHS Hazard Phrases:**

H225 - Highly flammable liquid and vapor.  
H302 - Harmful if swallowed.  
H319 - Causes serious eye irritation.

**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.  
P264 - Wash hands thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P271 - Use only outdoors or in a well-ventilated area.  
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.  
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P330 - Rinse mouth.  
P337+313 - If eye irritation persists, get medical advice/attention.  
P370+378 - In case of fire, use dry sand, dry chemical, or alcohol-resistant foam to extinguish.

<b>GHS Storage and Disposal Phrases:</b>	P361+364 - Take off immediately all contaminated clothing and wash it before reuse. P403+235 - Store in cool/well-ventilated place. P501 - Dispose of contents/container in accordance with local regulations.
<b>Potential Health Effects (Acute and Chronic):</b>	Hazards not otherwise classified (HNOC) or not covered by GHS -none. Hazards not otherwise classified (HNOC) or not covered by GHS.
	Repeated exposure may cause skin dryness or cracking.

### 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
107-87-9	2-Pentanone	90.0 -100.0 %
108-10-1	Methyl isobutyl ketone	5.0 -10.0 %

### 4. First Aid Measures

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

### 5. Fire Fighting Measures

<b>Flash Point:</b>	7.80 C (46.0 F) Method Used: TAG Closed Cup
<b>Explosive Limits:</b>	LEL: No data. UEL: No data.
<b>Autoignition Pt:</b>	No data.
<b>Suitable Extinguishing Media:</b>	Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.
<b>Unsuitable Extinguishing Media:</b>	Do not use water jet. Water may be ineffective.
<b>Fire Fighting Instructions:</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to cool unopened containers. Material is lighter than water and a fire may be spread by the use of water. Extremely flammable liquid and vapor.
<b>Flammable Properties and Hazards:</b>	Carbon oxides.
<b>Hazardous Combustion Products:</b>	No data available.

## 6. Accidental Release Measures

<b>Protective Precautions, Protective Equipment and Emergency Procedures:</b>	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.
<b>Environmental Precautions:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal. Use proper personal protective equipment as indicated in Section 8.

## 7. Handling and Storage

<b>Precautions To Be Taken in Handling:</b>	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. Use with adequate ventilation. Wash thoroughly after handling.
<b>Precautions To Be Taken in Storing:</b>	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 Storage class 510)
<b>Other Precautions:</b>	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
107-87-9	2-Pentanone	PEL: 200 ppm	No data.	No data.
108-10-1	Methyl isobutyl ketone	PEL: 100 ppm	No data.	No data.

### Personal Protective Equipment Symbols:

**Respiratory Equipment (Specify Type):** Respiratory: 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:** Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**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. 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 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:** 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 ventilation to keep airborne concentrations low. 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  
Controls:**

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

## 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas	[ X ] Liquid	[ ] Solid
<b>Appearance and Odor:</b>	Clear. solvent odor.		
<b>pH:</b>	No data.		
<b>Melting Point:</b>	-78.00 C (-108.4 F)		
<b>Boiling Point:</b>	101.00 C (213.8 F) / 0.0 mm Hg		
<b>Flash Point:</b>	7.80 C (46.0 F) TAG Closed Cup		
<b>Evaporation Rate:</b>	No data.		
<b>Flammability (solid, gas):</b>	No data available.		
<b>Explosive Limits:</b>	LEL: No data.	UEL: No data.	
<b>Vapor Pressure:</b>	No data.		
<b>Vapor Density (vs. Air=1):</b>	No data.		
<b>Specific Gravity (Water=1):</b>	No data.		
<b>Solubility in Water:</b>	No data.		
<b>Saturated Vapor Concentration:</b>	No data.		
<b>Octanol/Water Partition Coefficient:</b>	No data.		
<b>Autoignition Pt:</b>	No data.		
<b>Decomposition Temperature:</b>	No data.		
<b>Viscosity:</b>	No data.		
<b>Explosive Properties:</b>	No data available.		
<b>Information on other hazards:</b>	No data available.		

**10. Stability and Reactivity**

**Reactivity:** No data available.

**Stability:** Unstable [ ] Stable [ X ]

**Conditions To Avoid - Instability:** Heat, flames and sparks.

**Incompatibility - Materials To Avoid:** Oxidizing agents.

**Hazardous Decomposition or Byproducts:** In the event of fire: see section 5.

**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]

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

**11. Toxicological Information**

**Toxicological Information:** Acute toxicity.

Germ cell mutagenicity: No data available.

In vitro mammalian cell gene mutation test: Mouse. lymphoma cells. Result: negative.

Reproductive toxicity. Aspiration hazard: Developmental Toxicity. Inhalation. Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Effects on Embryo or Fetus: Fetal death.

Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities: Musculoskeletal system. Specific Developmental Abnormalities: Cardiovascular (circulatory) system.

**Irritation or Corrosion:** Skin corrosion/irritation. Skin. Species: Guinea pig. Result: Mild skin irritation (OECD Test Guideline 404) Rabbit.

Moderate eye irritation. (OECD Test Guideline 405) Result: Tumorigenic:Tumors at site or application. Mild skin irritation -24 Eyes:

**Sensitization:** No data available.

**Chronic Toxicological Effects:** Specific target organ toxicity - single exposure: No data available.

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

**Carcinogenicity/Other Information:** 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. IARC: 2B - Group 2B: Possibly carcinogenic to humans (4-Methylpentan-2-one).

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
107-87-9	2-Pentanone	n.a.	n.a.	n.a.	n.a.
108-10-1	Methyl isobutyl ketone	n.a.	2B	n.a.	n.a.

## 12. Ecological Information

	No data available.
<b>Results of PBT and vPvB assessment:</b>	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
<b>Persistence and Degradability:</b>	Biodegradability aerobic -Exposure time 28 d Result: 70 % -Readily biodegradable. Biodegradability: Biotic/Aerobic.
<b>Bioaccumulative Potential:</b>	No data available.
<b>Mobility in Soil:</b>	No data available.
<b>Other adverse effects:</b>	No data available.

## 13. Disposal Considerations

<b>Waste Disposal Method:</b>	Product: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. 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: Dispose of contents/container in accordance with local/regional/national and international regulations.
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## 14. Transport Information

### LAND TRANSPORT (US DOT):

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



### LAND TRANSPORT (Canadian TDG):

<b>TDG Shipping Name:</b>	Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or reducing compound), flammable] Printing ink related material.		
<b>UN Number:</b>	UN1210	<b>Packing Group:</b>	II
<b>Hazard Class:</b>	3 - FLAMMABLE LIQUID	<b>TDG Classification:</b>	

### LAND TRANSPORT (European ADR/RID):

<b>ADR/RID Shipping Name:</b>	Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or reducing compound), flammable]		
<b>UN Number:</b>	UN1210	<b>Packing Group:</b>	II
<b>Hazard Class:</b>	3 - FLAMMABLE LIQUID		

### MARINE TRANSPORT (IMDG/IMO):

<b>IMDG/IMO Shipping Name:</b>	Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or reducing compound), flammable]		
<b>UN Number:</b>	UN1210	<b>Packing Group:</b>	II
<b>Hazard Class:</b>	3 - FLAMMABLE LIQUID		

**AIR TRANSPORT (ICAO/IATA):**

**ICAO/IATA Shipping Name:** Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or reducing compound), flammable]

**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)
107-87-9	2-Pentanone	No	No	No
108-10-1	Methyl isobutyl ketone	No	Yes NA	Yes (10%)

**EPA SARA Title III Section 313 Toxic Release Inventory.**

This product contains a toxic chemical or chemicals subject to the reporting requirements of EPCRA Section 313 (40 CFR Section 372).

**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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Reproductive toxicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Organic peroxide	<input type="checkbox"/> Yes <input checked="" 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 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)		

**California Proposition 65**

**WARNING**

This product can expose you to chemicals including Methyl isobutyl ketone, 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](http://www.P65Warnings.ca.gov).

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
107-87-9	2-Pentanone	TSCA: Inventory CA TAC, Title 8: Title 8
108-10-1	Methyl isobutyl ketone	TSCA: Inventory CA PROP.65: Yes: Canc+RDTox. CA TAC, Title 8: TAC: Cat. IVa, Title 8 NC TAP: Yes: NC TAP

  

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
107-87-9	2-Pentanone	Japan ENCS: 2-542 Germany WHCS: 590: WGK 1 Switzerland Giftliste 1: G-2529 REACH: (P), 01-2119988840-24: Full
108-10-1	Methyl isobutyl ketone	Mexico INSQ: 1245 Japan ENCS: 2-542 Germany WHCS: 137: WGK 1 Switzerland Giftliste 1: G-2468 REACH: (P), 01-2119473980-30: Full

**16. Other Information**

**Revision Date:** 04/16/2025

**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.