

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2015/830; US OSHA HCS 2015; and Canadian WHMIS 2015.

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Name: JP-Y108, 1108Y
Trade Name: JP-Y108
CAS Number: 78-93-3

1.2 Relevant identified uses of the substance or mixture and uses advised against:

1.3 Details of the Supplier of the Safety Data Sheet:

Company Name: Hitachi Industrial Equipment & Solutions America, LLC **Phone Number:**
2730 Greenleaf Avenue Elk (866)583-0048
Grove Village, IL 60007
Web site address: <http://www.hitachi-america.us/ice/marketing-and-coding>
(980)500-7144
Information: Christian Krzykwa

1.4 Emergency telephone number:

Emergency Contact: Chemtrec (800)424-9300

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:

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 3
Specific Target Organ Toxicity (repeated exposure), Category 1
Acute Toxicity: Inhalation, Category 5
Specific Target Organ Toxicity (single exposure), Category 2
Aspiration Toxicity, Category 2

2.2 Label Elements:



GHS Signal Word: **Danger**

Hazard-determining components of labelling:

Methyl ethyl ketone

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.
H333 - May be harmful if inhaled.
H336 - May cause drowsiness or dizziness.
H370 - Causes damage to organs
H371 - May cause damage to organs .
H372 - Causes damage to organs through prolonged or repeated exposure.

GHS Precautionary 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.
- P308+311 - If exposed or concerned: Call a POISON CENTER/Doctor/...
- 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+364 - Take off contaminated clothing and wash it before reuse.

GHS Storage and Disposal Phrases:

- P403+235 - Store in cool & well-ventilated place.
- P405 - Store locked up.
- P501 - Dispose of contents/container to ...

UFI:

2.3 Adverse Human Health Hazards not otherwise classified (HNOC) or not covered by GHS.

Effects and Symptoms:

Section 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
78-93-3	Methyl ethyl ketone 01-2119457290-43	70.0 -80.0 %	201-159-0 606-002-00-3	Flam. Liq. 2: H225 Eye Damage 2: H319 STOT (SE) 3: H336 EUH066
NA	(Trade Secret)NA	20.0 -30.0 %	NA NA	No data available.

Section 4. First Aid Measures

- 4.1 Description of First Aid Measures:** 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.
- In Case of Skin Contact:** Wash off with soap and plenty of water. Consult a physician.
- In Case of Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- In Case of Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
- 4.2 Important Symptoms and Effects, Both Acute and Delayed:** The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
- 4.3 Indication of any immediate medical attention and special treatment needed:** No data available.

Section 5. Fire Fighting Measures

- 5.1 Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.
- 5.2 Flammable Properties and Hazards:** Carbon oxides, Flash back possible over considerable distance. Container explosion may occur under fire conditions.
- Flash Pt:** -2.99 C (26.6 F) Method Used: Closed Cup
- Explosive Limits:** LEL: 1.8 %(V) UEL: 10.1 %(V)
- Autoignition Pt:** No data.
- 5.3 Fire Fighting Instructions:** Wear self contained breathing apparatus for fire fighting if necessary. Further information.

Section 6. Accidental Release Measures

- 6.1 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.
- 6.2 Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
- 6.3 Methods and Material For Containment and Cleaning Up:** 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).

Section 7. Handling and Storage

- 7.1 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.
- 7.2 Precautions To Be Taken in Storing:** Store under inert gas. 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 510)
- Other Precautions:** Apart from the uses mentioned in section 1 no other specific uses are stipulated.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
78-93-3	Methyl ethyl ketone	ACGIH TLV	TLV: 200 ppm STEL: 300 ppm	
		Europe	TWA: 600 mg/m3 (200 ppm) STEL: 900 mg/m3 (300 ppm)	
		France VL	TWA: 600 mg/m3 (200 ppm) STEL: 900 mg/m3 (300 ppm)	
		OSHA PELs	PEL: 200 ppm	
		Britain EH40	TWA: 600 mg/m3 (200 ppm) STEL: 899 mg/m3 (300 ppm)	Skin Absorption

Derived No-Effect Levels / Predicted No Effect Concentrations:

78-93-3 Methyl ethyl ketone

DNEL Worker	Value	Remarks
Long-term - Eyes, local effects		Age Effects.
Long-term - Inhalation, local effects		Age Effects.
Long-term - Inhalation, systemic effects		Affected fish lost equilibrium prior to death.
Long-term - Dermal, local effects		Age Effects.
Long-term - Dermal, systemic effects		Age Effects.
Acute - Inhalation, local effects		Age Effects.
Acute - Inhalation, systemic effects	600.000 mg/m ³	Age Effects.
Acute - Dermal, local effects		Age Effects.
Acute - Dermal, systemic effects	1161.000 mg/kg bw/day	Age Effects.
DNEL Consumer	Value	Remarks
Long-term - Eyes, local effects		Affected fish swam at or near surface. Affected fish lost equilibrium prior to death.
Long-term - Inhalation, local effects		Age Effects.
Long-term - Inhalation, systemic effects		Sex Effects.
Long-term - Oral, systemic effects		Age Effects.
Long-term - Dermal, local effects		Age Effects.
Long-term - Dermal, systemic effects		Age Effects.
Acute - Inhalation, local effects		Affected fish lost equilibrium prior to death.
Acute - Inhalation, systemic effects	212.000 mg/m ³	Sex Effects.
Acute - Oral, systemic effects	62.000 mg/kg bw/day	Age Effects.
Acute - Dermal, local effects		Sex Effects.

Acute - Dermal, systemic effects	824.000	mg/kg bw/day	Age Effects.
PNEC	Value		Remarks
aquatic, sediment, freshwater	284.740	mg/kg sediment	Age Effects.
aquatic, sediment, marine water	284.700	mg/kg sediment	Age Effects.
aquatic, freshwater	55.800	mg/L	Age Effects.
air			Age Effects.
aquatic, marine water	55.800	mg/L	Affected fish lost equilibrium prior to death.
predators, secondary poisoning	1000.000	mg/kg food	Age Effects.
soil	22.500	mg/kg soil dw	Age Effects.
aquatic, STP	709.000	mg/L	Age Effects.

8.2 Exposure Controls:

8.2.1 Engineering Controls (Ventilation etc.): Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Personal protection equipment:

Eye Protection: Face shield and safety glasses.

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. Splash contact:
Material: butyl-rubber Minimum layer thickness: 0.3 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: Impervious clothing. Flame retardant antistatic protective clothing.

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).

8.2.3 Environmental Exposure Controls: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States: Gas Liquid Solid

Appearance and Odor: yellow.
solvent odor.

pH: NA

Melting Point: -86.99 C (-124.6 F)

Boiling Point: 80.00 C (176.0 F)

Flash Pt: -2.99 C (26.6 F) Method Used: Closed Cup

Evaporation Rate: NA

Flammability (solid, gas): No data available.

Explosive Limits: LEL: 1.8 %(V) UEL: 10.1 %(V)

Vapor Pressure (vs. Air or mm Hg): 95 hPa at 20.0 C (68.0 F)

Vapor Density (vs. Air = 1): 2.49 - (Air=1.0)

Specific Gravity (Water = 1): No data.

Density: 0.805 g/mL at 20.0 C (68.0 F)

Solubility in Water: soluble

Octanol/Water Partition Coefficient: 0.29

Autoignition Pt: No data.

Decomposition Temperature: No data.

Viscosity: NA

Explosive Properties: No data available.

Oxidizing Properties: No data available.

9.2 Other Information

Percent Volatile: No data.

Section 10. Stability and Reactivity

10.1 Reactivity: No data available.

10.2 Stability: Unstable Stable

10.3 Conditions To Avoid - Hazardous Reactions: Vapors may form explosive mixture with air.

Possibility of Hazardous Reactions: Will occur Will not occur

10.4 Conditions To Avoid - Instability: Exposure to moisture. Heat.

10.5 Incompatibility - Materials To Avoid: Oxidizing agents, Strong reducing agents.

10.6 Hazardous Decomposition or Byproducts: No data available. In the event of fire: see section 5.

Section 11. Toxicological Information

- 11.1 Information on Toxicological Effects:** Acute toxicity.
- Germ cell mutagenicity: No data available.
Reproductive toxicity. Aspiration hazard:
- Irritation or Corrosion:** Skin corrosion/irritation.
Result: Tumorigenic: Tumors at site or application. No skin irritation . (OECD Test Guideline 404) Serious eye damage/eye irritation Eyes -Rabbit
Irritating to eyes .
- Sensitization:** No data available.
- Chronic Toxicological Effects:** Specific target organ toxicity - single exposure: May cause drowsiness or dizziness.
Specific target organ toxicity -repeated exposure: no data available.
- Carcinogenicity/Other Information:** 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.
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.
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.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
78-93-3	Methyl ethyl ketone	n.a.	n.a.	n.a.	n.a.
NA	(Trade Secret)	n.a.	n.a.	n.a.	n.a.

Section 12. Ecological Information

- 12.1 Toxicity:** No data available.
- 12.2 Persistence and Degradability:** No data available.
- 12.3 Bioaccumulative Potential:** No data available.
- 12.4 Mobility in Soil:** No data available.
- 12.5 Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
- 12.6 Other adverse effects:** No data available.

Section 13. Disposal Considerations

- 13.1 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. 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:

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

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



14.1 LAND TRANSPORT (Canadian TDG):

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

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name:
UN Number: 1210 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Methyl ethyl ketone. mixture.
UN Number: 1210 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID

Section 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)
78-93-3	Methyl ethyl ketone	No	Yes 5000 LB	No
NA	(Trade Secret)	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)	Canadian NPRI	Canadian Toxic	Canadian DSL
78-93-3	Methyl ethyl ketone	Yes: Part 5	No	Yes
NA	(Trade Secret)	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
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
NA	(Trade Secret)	TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; NC TAP:

No

CAS # **Hazardous Components (Chemical Name)**
78-93-3 Methyl ethyl ketone

International Regulatory Lists

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 Giftliste 1: Yes - G-2429; Switzerland INNS: No; REACH: Yes - 01-2119457290-43: Full, (P); Rotterdam: No
Mexico INSQ: No; Australia ICS: No; New Zealand IOC: No; Japan ENCS: No; Japan ISHL: No; Israel HSL: No; Germany WHCS: No; Switzerland Giftliste 1: No; Switzerland INNS: No; REACH: No; Rotterdam: No

NA (Trade Secret)

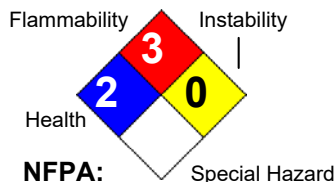
Section 16. Other Information

Revision Date: 01/05/2021

Hazard Rating System:

HEALTH	*	2
FLAMMABILITY		3
PHYSICAL		0
PPE		

HMIS:



Additional Information About No data available.

This Product: