

**1. Product and Company Identification**

**Product Name:** JP-F80A, 1080F  
**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 2  
Toxic To Reproduction, Category 1B  
Specific Target Organ Toxicity (single exposure), Category 3  
Acute Toxicity: Oral, Category 5  
Acute Toxicity: Inhalation, Category 5  
Skin Corrosion/Irritation, Category 2  
Specific Target Organ Toxicity (single exposure), Category 2  
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.  
H303 - May be harmful if swallowed.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H333 - May be harmful if inhaled.  
H336 - May cause drowsiness or dizziness.  
Causes respiratory irritation.  
H372 - Causes damage to organs central & 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.  
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/.../ 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.

<b>GHS Response Phrases:</b>	P370+378 - In case of fire, use dry chemical, CO <sub>2</sub> , water spray or foam to extinguish. P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331 - Do NOT induce vomiting. P302+352 - IF ON SKIN: Wash with plenty of soap and water. P361+364 - Take off immediately all contaminated clothing and wash it 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. P332+313 - If skin irritation occurs, get medical advice/attention. P337+313 - If eye irritation persists, get medical advice/attention.
<b>GHS Storage and Disposal Phrases:</b>	P403+233 - Store container tightly closed in a cool and well-ventilated place. P405 - Store locked up. P501 - Dispose of contents/container in accordance with local regulations.

**Emergency Overview:**

**Potential Health Effects (Acute and Chronic):** Hazards not otherwise classified (HNOC) or not covered by GHS.

### 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
85-68-7	Butyl benzyl phthalate	1.0 -5.0 %
78-93-3	Methyl ethyl ketone	100.0 %

### 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. Consult a physician.
<b>In Case of Skin Contact:</b>	Wash off with soap and plenty of water. Consult a physician.
<b>In Case of Eye Contact:</b>	Flush eyes with water as a precaution. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>In Case of Ingestion:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Do NOT induce vomiting.
<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.

## 5. Fire Fighting Measures

<b>Flash Pt:</b>	> -6.00 C (21.2 F) Method Used: TAG Closed Cup
<b>Explosive Limits:</b>	LEL: 1.8 % UEL: 11.5 %
<b>Autoignition Pt:</b>	>= 505.00 C (941.0 F)
<b>Suitable Extinguishing Media:</b>	Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.
<b>Fire Fighting Instructions:</b>	Wear self contained breathing apparatus for fire fighting if necessary. Further information.
<b>Flammable Properties and Hazards:</b>	Carbon oxides, Flash back possible over considerable distance. Container explosion may occur under fire conditions.
<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. Evacuate personnel to safe areas. For personal protection see section 8. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
<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. Methods and materials for containment and cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	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

<b>Precautions To Be Taken in Handling:</b>	Avoid inhalation of vapor or mist. For precautions see section 2. Avoid contact with skin and eyes. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
<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. Hygroscopic. 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
85-68-7	Butyl benzyl phthalate	No data.	No data.	No data.
78-93-3	Methyl ethyl ketone	PEL: 200 ppm	TLV: 200 ppm STEL: 300 ppm	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:**

Safety glasses with side-shields conforming to EN166. 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. Full contact.  
Material: Nitrile rubber Minimum layer thickness: 0.4 mm.  
Material: Nature latex/chloroprene. Minimum layer thickness: 0.6 mm Break through time: 60 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. Splash contact:  
Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 292 min.

**Other Protective Clothing:**

Impervious clothing. Flame retardant antistatic protective clothing.

**Engineering Controls (Ventilation etc.):**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**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>	colorless. solvent odor.
<b>pH:</b>	4.6
<b>Melting Point:</b>	-86.00 C (-122.8 F)
<b>Boiling Point:</b>	80.00 C (176.0 F) - 370.00 C (698.0 F)
<b>Flash Pt:</b>	> -6.00 C (21.2 F) Method Used: TAG Closed Cup
<b>Evaporation Rate:</b>	No data.
<b>Flammability (solid, gas):</b>	No data available.
<b>Explosive Limits:</b>	LEL: 1.8 % UEL: 11.5 %
<b>Vapor Pressure (vs. Air or mm Hg):</b>	10.5
<b>Vapor Density (vs. Air = 1):</b>	2.41(air=1)
<b>Specific Gravity (Water = 1):</b>	0.85
<b>Solubility in Water:</b>	29

**Saturated Vapor Concentration:** No data.

**Octanol/Water Partition Coefficient:** 0.29 as MEK

**Autoignition Pt:** >= 505.00 C (941.0 F)

**Decomposition Temperature:** No data.

**Viscosity:** No data.

**Explosive Properties:** No data available.

**Oxidizing Properties:** No data available.

**Information with regard to primary physical hazard:**

## 10. Stability and Reactivity

**Reactivity:** No data available.

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

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

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

**Hazardous Decomposition or Byproducts:** Other decomposition products: No data available. In the event of fire: see section 5.

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

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

## 11. Toxicological Information

**Toxicological Information:** Germ cell mutagenicity: Ames test.  
Genotoxicity in vitro - mouse - S.typhimurium: Host-mediated assay.  
Result: negative.  
Reproductive toxicity. Presumed human reproductive toxicant. Overexposure may cause reproductive disorder(s) based on tests with laboratory animals. Specific target organ toxicity - single exposure: No data available.  
Specific target organ toxicity - repeated exposure: Aspiration hazard: Acute toxicity.

CAS# 78-93-3:  
1. Acute toxicity, TClO, Inhalation, Human, 100.0 PPM, 5 M.  
Result:  
Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes.  
Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Conjunctive irritation.  
Lungs, Thorax, or Respiration:Other changes.  
- Journal of Industrial Hygiene and Toxicology, Vol/p/yr: 25,282, 1943

2. Acute toxicity, LD50, Oral, Mouse, 4050. MG/KG.  
Result:  
Behavioral: Sleep.

Behavioral: Headache.

Gastrointestinal:Nausea or vomiting.

- Toxicology Letters., Elsevier Science Pub. B.V., POB 211, 1000 AE, Amsterdam 1000 AE Netherlands, Vol/p/yr: 30,13, 1986

3. Acute toxicity, LC50, Inhalation, Mouse, 32.00 GM/M3, 4 H.

Result:

Gastrointestinal: Alteration in gastric secretion.

Gastrointestinal:Other changes.

- Current Toxicology, Nova Science Publishers, Inc., 6080 Jericho Turnpike, Suite 207, Commack, NY 11725, Vol/p/yr: 1,47, 1993

4. Acute toxicity, LD50, Intraperitoneal, Mouse, 616.0 MG/KG.

Result:

Behavioral: Change in motor activity (specific assay).

Behavioral: Ataxia.

Behavioral: Antipsychotic.

- Shell Chemical Company. Unpublished Report., Vol/p/yr: -,6, 1961

5. Acute toxicity, LD50, Skin, Species: Rabbit, 6480. MG/KG.

Result:

Behavioral: Hallucinations, distorted perceptions.

Endocrine:Effect on menstrual cycle.

- Shell Chemical Company., Vol/p/yr: MSDS-5390-,

6. Acute toxicity, TCLo, Inhalation, Human, 10.00 ppm.

Result:

Cardiac: Pulse rate decreased with fall in BP.

Lungs, Thorax, or Respiration:Other changes.

- Neurotoxicology., Intox Press, Inc., POB 34075, Little Rock, AR 72203, Vol/p/yr: 24,179, 2003

7. Acute toxicity, LC50, Inhalation, Mouse, 32.00 mg/m3.

Result:

Liver: Fatty liver degeneration.

8. Standard Draize Test, Eyes, Human, 350.0 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

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

Result:

Behavioral: Ataxia.

Lungs, Thorax, or Respiration:Dyspnea.

Gastrointestinal:Hypermotility, diarrhea.

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

**Irritation or Corrosion:**

Skin corrosion/irritation. No data available.

Serious eye damage/eye 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 .
<b>Sensitization:</b>	Guinea pig 88%, 4 Result: Tumorigenic:Tumors at site or application. No data available.
<b>Chronic Toxicological Effects:</b>	Specific target organ toxicity - single exposure: May cause drowsiness or dizziness. Specific target organ toxicity -repeated exposure: no data available.
<b>Carcinogenicity/Other Information:</b>	This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification. IARC: 3 -Group 3: Not classifiable as to its carcinogenicity to humans. 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. 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.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
85-68-7	Butyl benzyl phthalate	n.a.	3	n.a.	n.a.
78-93-3	Methyl ethyl ketone	n.a.	n.a.	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 , Result: 81 % - Readily biodegradable. - Readily biodegradable. No data available.
<b>Bioaccumulative Potential:</b>	Bioaccumulation: Lepomis macrochirus (Bluegill) - 21 d Bioconcentration factor (BCF): 663 No data available.
<b>Mobility in Soil:</b>	No data available.
<b>Other adverse effects:</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects. Avoid release to the environment. No data available.

## 13. Disposal Considerations

<b>Waste Disposal Method:</b>	Product: 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: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.
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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>	1210	<b>Packing Group:</b>	II





**LAND TRANSPORT (Canadian TDG):**

**TDG Shipping Name:** Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or reducing compound), flammable]  
**UN Number:** 1210 **Packing Group:** II  
**Hazard Class:** 3 - FLAMMABLE LIQUID **TDG Classification:**

**MARINE TRANSPORT (IMDG/IMO):**

**IMDG/IMO Shipping Name:** ETHYL METHYL KETONE. mixture.  
**UN Number:** 1210 **Packing Group:** II  
**Hazard Class:** 3 - FLAMMABLE LIQUID  
**IMDG MFAG Number:**

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

**ICAO/IATA Shipping Name:** Ethyl methyl ketone. mixture.  
**UN Number:** 1210 **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)
85-68-7	Butyl benzyl phthalate	No	Yes NA	No
78-93-3	Methyl ethyl ketone	No	Yes NA	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 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 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
85-68-7	Butyl benzyl phthalate	Yes: Part 1A		Yes
78-93-3	Methyl ethyl ketone	Yes: Part 5	No	Yes

**California Proposition 65**



**WARNING**

This product can expose you to chemicals including Styrene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov). This product can expose you to chemicals including Butyl benzyl phthalate; Toluene and Di-n-Butyl phthalate (DBP), which are known to the State of California to cause 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
85-68-7	Butyl benzyl phthalate	TSCA: Inventory CA PROP.65: Yes: RDTox. CA TAC, Title 8: TAC: Cat. IVb, Title 8
78-93-3	Methyl ethyl ketone	TSCA: Inventory CA TAC, Title 8: TAC: Cat. IIa, Title 8 NC TAP: Yes: NC TAP



CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
85-68-7	Butyl benzyl phthalate	Japan ENCS: 3-1312 Germany WHCS: 278: WGK 2 Switzerland Giftliste 1: G-4167 REACH: 01-2119489376-23: Full, (P), T2
78-93-3	Methyl ethyl ketone	Mexico INSQ: 1193 Japan ENCS: 2-542 Germany WHCS: 150: WGK 1 Switzerland Giftliste 1: G-2429 REACH: 01-2119457290-43: Full, (P)

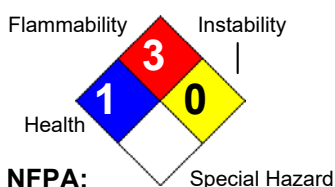
## 16. Other Information

**Revision Date:** 01/18/2023      **Previous revision:** 08/08/2018

**Hazard Rating System:**

<b>HEALTH</b>	1
<b>FLAMMABILITY</b>	3
<b>PHYSICAL</b>	0
<b>PPE</b>	<b>B</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.

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(980)500-7144

**Company Policy or Disclaimer:**