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according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2020/878; US OSHA HCS 2015; and Canadian WHMIS 2015.

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

1.1 Product Code: JP-K83
Product Name: JP-K83

X Code: X(22,53)1276

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

2730 Greenleaf Avenue Phone Number: Elk Grove Village, IL 60007 (866)583-0048

Information: Christian Krzykwa (980)500-7144

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

Serious Eye Damage/Eye Irritation, Category 2A

Specific Target Organ Toxicity (single exposure), Category 3

Specific Target Organ Toxicity (single exposure), Category 1

Skin Sensitization, Category 1

Toxic To Reproduction, Category 2

Acute Toxicity: Skin, Category 4

Flammable Liquids, Category 4

Carcinogenicity, Category 1A

Flammable Liquids, Category 3

Toxic To Reproduction, Category 1B

2.2 Label Elements:







GHS Signal Word: Danger

Hazard-determining components of labelling:

2- Butonone

Methanol

4,4'-Isopropylidenediphenol

Ethylene glycol monopropyl ether

Formaldehyde

2-Propanol, 1-Methoxy-

N-Methyl-2-pyrrolidone

Black dye

Diphenylamine

GHS Hazard Phrases:

H225 - Highly flammable liquid and vapor.

H226 - Flammable liquid and vapor.

H227 - Combustible liquid.



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- H312 Harmful in contact with skin.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H350 May cause cancer.
- H360 May damage fertility or the unborn child .
- H361 Suspected of damaging fertility or the unborn child .
- H370 Causes damage to organs

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.
- 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.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:

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 of concerned: Call a POISON CENTER/Doctor/...
- P313 Get medical advice/attention.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P321 Specific treatment see ... on this label.
- P333+313 If skin irritation or rash occurs, seek 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:

- 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. Hazards not otherwise Effects and Symptoms: classified (HNOC) or not covered by GHS -none.

Section 3. Composition/Information on Ingredients CAS# Hazardous Components (Chemical Name)/ Concentration EC No./ **GHS Classification REACH Registration No.** EC Index No. 78-93-3 2- Butonone 30.0 -60.0 % 201-159-0 Flam. Liq. 2: H225 01-2119457290-43-xxxx 606-002-00-3 Eye Damage 2: H319 STOT (SE) 3: H336 **EUH066** 67-56-1 Methanol 13.5 -40.0 % 200-659-6 Flam. Liq. 2: H225



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			;	Supersedes Revision: 03/04/2022
	01-2119392409-28		603-001-00-X	Acute Tox.(O) 3: H301 Acute Tox.(D) 3: H311 Acute Tox.(I) 3: H331 STOT (SE) 1: H370
80-05-7	4,4'-Isopropylidenediphenol 01-2119457856-23	1.0 -5.4 %	201-245-8 604-030-00-0	Toxic Repro. 1B: H360 STOT (SE) 3: H335 H336 Eye Damage 1: H318 Skin Sens. 1: H317 H361F
2807-30-9	Ethylene glycol monopropyl ether 01-2119883539-19	0.1 -1.5 %	220-548-6 603-095-00-2	Acute Tox.(D) 4: H312 Eye Damage 2: H319
50-00-0	Formaldehyde 01-2119488953-20	0.01 -0.15 %	200-001-8 605-001-00-5	Acute Tox.(O) 3: H301 Acute Tox.(D) 3: H311 Acute Tox.(I) 3: H331 Skin Corr. 1B: H314 Skin Sens. 1: H317 Carcinogen 1B: H350 Mutagen 2: H341
107-98-2	2-Propanol, 1-Methoxy- 01-2119457435-35	2.985 -7.0 %	203-539-1 603-064-00-3	Flam. Liq. 3: H226 STOT (SE) 3: H335 H336
872-50-4	N-Methyl-2-pyrrolidone 01-2119472430-46	0.998 -4.99 %	212-828-1 606-021-00-7	Toxic Repro. 1B: H360D STOT (SE) 3: H335 Skin Corr. 2: H315 Eye Damage 2: H319
8047-99-2	Toluene ethylsulfonamide 01-2120791115-55	1.0 -5.0 %	232-465-2 NA	No GHS classifications apply.
108-94-1	Cyclohexanone 01-2119453616-35	0.0 -1.0 %	203-631-1 606-010-00-7	Flam. Liq. 3: H226 Acute Tox.(I) 4: H332
7790-69-4	Lithium nitrate 01-2119968667-16	0.0 -1.0 %	232-218-9 NA	Ox. Sol. 3: H272
8005-02-5	Black dye	0.0 -4.85 %	NA NA	Acute Tox.(O) 3: H301 Acute Tox.(D) 3: H311 Skin Sens. 1: H317 Eye Damage 1: H318 Acute Tox.(I) 3: H331 Mutagen 2: H341 Carcinogen 2: H351 STOT (RE) 1: H372 Aquatic (A) 1: H400
122-39-4	Diphenylamine 01-2119488966-13	0.0 -0.125 %	204-539-4 612-026-00-5	Acute Tox.(O) 3: H301 Acute Tox.(D) 3: H311 Acute Tox.(I) 3: H331 STOT (RE) 2: H373 Aquatic (A) 1: H400 Aquatic (C) 1: H410



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Section 4. First Aid Measures

4.1 Description of First AidConsult a physician. Show this safety data sheet to the doctor in attendance. Move out of

Measures: 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 Wash off with soap and plenty of water. Consult a physician. Take victim immediately to

hospital. Take off contaminated clothing and shoes immediately. Contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. In Case of Eve Contact: Flush eyes with water as a precaution. Continue rinsing eyes during transport to hospital.

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 The most important known symptoms and effects are described in the labelling (see **Important Symptoms**

section 2.2) and/or in section 11 and Effects, Both

Acute and Delayed:

No data available. 4.3 Indication of any

> immediate medical attention and special treatment needed:

Section 5. Fire Fighting Measures

Suitable Extinguishing Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. 5.1

5.2 Flammable Properties Carbon oxides,

> and Hazards: Flash back possible over considerable distance. Container explosion may occur under

> > fire conditions. No data available. Vapors may form explosive mixture with air. May form

peroxides of unknown stability. Carbon oxides.

No data available.

> -2.99 C Method Used: Estimate Flash Pt:

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

For Containment and

Cleaning Up:

5.3 Fire Fighting Wear self contained breathing apparatus for fire fighting if necessary.

Instructions: Further information.

Section 6. Accidental Release Measures

Protective Precautions, Use personal protective equipment. Ensure adequate ventilation. Remove all sources of 6.1

ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form **Protective Equipment** explosive concentrations. Vapours can accumulate in low areas. For personal protection and Emergency

see section 8. Wear respiratory protection. **Procedures:**

6.2 **Environmental** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Precautions: Discharge into the environment must be avoided.

Methods and Material Contain spillage, and then collect with an electrically protected vacuum cleaner or by 6.3 wet-brushing and place in container for disposal according to local regulations (see

section 13). Pick up and arrange disposal without creating dust. Sweep up and shovel.

Keep in suitable, closed containers for disposal.



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Section 7. Handling and Storage

7.1 Precautions To Be Taken in Handling:

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. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Precautions To Be Taken in Storing:

Store under inert gas. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class 510) Recommended storage temperature: 2 -8 - 8 deg.C. Storage class (TRGS 510): Non Combustible Solids Noncombustible. acute toxic, hazardous materials. Toxic. Forms explosive peroxides on prolonged storage. May form

peroxides on contact with air.

flammable liquids.

Other Precautions: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated. Apart

from the uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8. Exposure Controls/Personal Protection

8.1 Ex	xposure Parameters:			
CAS#	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
78-93-3	2- Butonone	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
67-56-1	Methanol	ACGIH TLV	TLV: 200 ppm STEL: 250 ppm	
		Europe	TWA: 260 mg/m3 (200 ppm)	Skin Absorption
		France VL	TWA: 260 mg/m3 (200 ppm) STEL: 1300 mg/m3 (1000 ppm)	
		OSHA PELs	PEL: 200 ppm	
		Britain EH40	TWA: 266 mg/m3 (200 ppm) STEL: 333 mg/m3 (250 ppm)	Skin Absorption
50-00-0	Formaldehyde	ACGIH TLV	CEIL: 0.3 ppm	
		France VL	TWA: 0.5 ppm STEL: 1 ppm	
		OSHA PELs	PEL: 0.75 ppm (see 1910.1048) STEL: 2 ppm (15 min)	
		Britain EH40	TWA: 2.5 mg/m3 (2 ppm) STEL: 2.5 mg/m3 (2 ppm)	
107-98-2	2 2-Propanol, 1-Methoxy-	ACGIH TLV	TLV: 100 ppm STEL: 150 ppm	
		Europe	TWA: 375 mg/m3 (100 ppm) STEL: 568 mg/m3 (150 ppm)	Skin Absorption
		France VL	TWA: 188 mg/m3 (50 ppm) STEL: 375 mg/m3 (100 ppm)	
		Britain EH40	TWA: 375 mg/m3 (100 ppm)	Skin Absorption

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STEL: 560 mg/m3 (150 ppm)

Britain EH40 872-50-4 N-Methyl-2-pyrrolidone TWA: 103 mg/m3 (25 ppm) Skin Absorption

STEL: 309 mg/m3 (75 ppm)

108-94-1 Cyclohexanone **ACGIH TLV** TLV: 20 ppm

STEL: 50 ppm

Europe TWA: 40.8 mg/m3 (10 ppm) Skin Absorption

STEL: 81.6 mg/m3 (20 ppm)

OSHA PFI s PEL: 50 ppm

Britain EH40 TWA: 41 mg/m3 (10 ppm) Skin Absorption

STEL: 82 mg/m3 (20 ppm)

122-39-4 Diphenylamine **ACGIH TLV** TLV: 10 mg/m3

> France VL TWA: 10 mg/m3 Britain EH40 TWA: 10 mg/m3 ()

STEL: 20 mg/m3 ()

8.2 **Exposure Controls:**

8.2.1 Engineering Controls Handle in accordance with good industrial hygiene and safety practice. Wash hands

(Ventilation etc.): before breaks and at the end of workday. Avoid contact with skin, eyes and clothing.

Wash hands before breaks and immediately after handling the product.

8.2.2 Personal protection equipment:

Eye Protection: Tightly fitting safety goggles.

Protective Gloves: Use proper glove removal technique (without touching glove's outer surface) to avoid

skin contact with this product. Wash and dry hands. Material: butyl-rubber Minimum layer

thickness: 0.3 mm Break through time: 292 min.

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. Full

contact.

Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: > 480 min.

Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min. Material: Nature latex/chloroprene. Minimum layer thickness: 0.6 mm Break through

time: 35 min.

Other Protective

Complete suit protecting against chemicals.

Clothing:

Respiratory Equipment No data available.

(Specify Type):

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

Discharge into the environment must be avoided. **Exposure Controls:**

No data available. **Exposure Scenarios:**

Section 9. Physical and Chemical Properties

Information on Basic Physical and Chemical Properties 9.1

> [X] Liquid **Physical States:** [] Gas [] Solid liquid. Color: Dark solvent odor. Appearance and Odor:

pH: No data.

-97.80 C - 159.00 C **Melting Point:**

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Boiling Point: 80.00 C - 153.00 C

Flash Pt: > -2.99 C Method Used: Estimate

Evaporation Rate: No data. **Saturated Vapor** No data.

Concentration:

Flammability (solid, gas): No data available.

Explosive Limits: LEL: No data. UEL: No data.

Vapor Pressure (vs. Air or

mm Hg):

No data.

Vapor Density (vs. Air = 1): No data. Specific Gravity (Water = 1): No data.

Density: ~ 0.8880 G/ML (~ 7.41 - LB/GA)

Solubility in Water: No data.

Octanol/Water Partition No data.

Coefficient:

Autoignition Pt:No data.DecompositionNo data.

Temperature:

Viscosity: No data.

Explosive Properties: No data available. **Oxidizing Properties:** No data available.

9.2 Other Information

9.2.1 Information with regard to physical hazard classes

Information with regard to primary physical hazard:

9.2.2 Other safety characteristics

Section 10. Stability and Reactivity

10.1 Reactivity: No data available.

10.2 Stability: Unstable [] Stable [X]

10.3 Conditions To Avoid - Vapors may form explosive mixture with air. No data available.

Hazardous Reactions:

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

Hazardous Reactions:

10.4 Conditions To Avoid - Exposure to moisture. Heat, flames and sparks. Extremes of temperature and direct

Instability: sunlight. No data available. Heat, May form peroxides on prolonged storage. Date

container and periodically test for peroxides.

10.5 Incompatibility - Strong reducing agents, No data available.

Materials To Avoid:

10.6 Hazardous No data available. In the event of fire: see section 5. Hazardous decomposition products

Decomposition or formed under fire conditions. -Carbon oxides.

Byproducts:



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Section 11. Toxicological Information

11.1 Information on

Germ cell mutagenicity. No data available.

Toxicological Effects:

Aspiration hazard: Inhalation: Dermal. Ames test.

GHS Classification: Result: negative. Mouse. male and female. Nutritional and Gross

Metabolic:Weight loss or decreased weight gain.

Lungs, Thorax, or Respiration: Dyspnea. Kidney, Ureter, Bladder: Hematuria.

in vitro assay

CAS# 1341-49-7: Rat. Inhalation. Maternal Effects: Other effects. Specific

Developmental Abnormalities: Musculoskeletal system.

Oral. Effects on Newborn: Stillbirth. Developmental Toxicity. Behavioral: Ataxia. Damage

to fetus possible.

CAS# 78-93-3:

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

Result:

Lungs, Thorax, or Respiration: Sputum.

Biochemical: Metabolism (Intermediary): Other proteins.

Biochemical:Metabolism (intermediary): Effect on inflammation or mediation of

inflammation.

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

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

Result:

Lungs, Thorax, or Respiration:Other changes.

Biochemical:Metabolism (intermediary): Effect on inflammation or mediation of

inflammation.

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

Acute toxicity, LC50, Inhalation, Mouse, 32.00 MG/M3.

Result:

Brain and Coverings: Other degenerative changes.

Biochemical:Metabolism (intermediary): Effect on inflammation or mediation of

inflammation.

Acute toxicity, LD50, Intraperitoneal, Species: Guinea pig, 2.000 GM/KG.

Result:

Immunological Including Allergic: Increase in humoral immune response.

CAS# 67-56-1:

Acute toxicity, LD50, Oral, Rat, 5628. MG/KG.

Result:

Behavioral: Food intake (animal).

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

- Gigiena Truda i Professional'nye Zabolevaniya.(Labor Hygiene and Occupational

Disease), V/O Mezhdunarodnaya Kniga, Moscow 113095 Russia, Vol/p/yr: 19(11),27,

1975

Acute toxicity, LD50, Intraperitoneal, Rat, 7529. MG/KG.

Result:

Lungs, Thorax, or Respiration: Acute pulmonary edema.

Blood:Changes in leukocyte (WBC) count.



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Related to Chronic Data - death.

- EHP, Environmental Health Perspectives., U.S. Government Printing Office, Supt of Documents, Washington, DC 20402, Vol/p/yr: 61,321, 1985

Acute toxicity, LD50, Intravenous, Rat, 2131. MG/KG.

Result:

Kidney, Ureter, Bladder:Other changes in urine composition.

- EHP, Environmental Health Perspectives., U.S. Government Printing Office, Supt of Documents, Washington, DC 20402, Vol/p/yr: 61,321, 1985

Acute toxicity, LD50, Oral, Mouse, 7300. MG/KG.

Result:

Behavioral: Somnolence (general depressed activity).

Lungs, Thorax, or Respiration:Dyspnea.

- Toxicology., Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick Ireland, Vol/p/yr: 25,271, 1982

Acute toxicity, LD50, Intraperitoneal, Mouse, 10765. MG/KG.

Result:

Effects on Embryo or Fetus: Fetal death.

Specific Developmental Abnormalities: Other developmental abnormalities.

- EHP, Environmental Health Perspectives., U.S. Government Printing Office, Supt of Documents, Washington, DC 20402, Vol/p/yr: 61,321, 1985

Acute toxicity, LD50, Subcutaneous, Mouse, 9800. MG/KG.

Result:

Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Effects on Newborn: Delayed effects.

- Toxicology and Applied Pharmacology, Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 18,185, 1971

Acute toxicity, LD50, Intravenous, Mouse, 4710. MG/KG.

Result:

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

- EHP, Environmental Health Perspectives., U.S. Government Printing Office, Supt of Documents, Washington, DC 20402, Vol/p/yr: 61,321, 1985

Acute toxicity, LD50, Oral, Species: Monkey., 7.000 GM/KG.

Result:

Behavioral: Muscle weakness.

Behavioral: Ataxia. Behavioral: Coma.

- Toxicology and Applied Pharmacology, Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 3,202, 1961

Acute toxicity, LD50, Oral, Species: Rabbit, 14200. MG/KG.

Result:

Specific Developmental Abnormalities: Craniofacial (including nose and tongue).

- FAO Nutrition Meetings Report Series., Vol/p/yr: 48A,105, 1970



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Acute toxicity, LD50, Skin, Species: Rabbit, 15800. MG/KG.

Result:

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Specific Developmental Abnormalities: Musculoskeletal system.

- Raw Material Data Handbook, Vol.1: Organic Solvents, 1974., National Assoc. of Printing Ink Research Institute, Francis McDonald Sinclair Memorial Labor, Lehigh Univ., Bethlehem, PA 18015, Vol/p/yr: 1,74, 1974

Acute toxicity, LD50, Intraperitoneal, Species: Rabbit, 1826. MG/KG.

Result:

Specific Developmental Abnormalities: Other developmental abnormalities.

- EHP, Environmental Health Perspectives., U.S. Government Printing Office, Supt of Documents, Washington, DC 20402, Vol/p/yr: 61,321, 1985

CAS# 107-98-2:

Acute toxicity, LD50, Intravenous, Mouse, 5300. MG/KG.

Result:

Behavioral: Convulsions or effect on seizure threshold.

Behavioral: Ataxia.

Lungs, Thorax, or Respiration:Dyspnea.

- Arzneimittel-Forschung. Drug Research. (Editio Cantor Verlag,, Vol/p/yr: 22,569, 1972

Acute toxicity, LD50, Oral, Dog, 5.000 GM/KG.

Result:

Tumorigenic: Carcinogenic by RTECS criteria.

Tumorigenic:Facilitates action of known carcinogens.

Lungs, Thorax, or Respiration: Tumors.

- Arzneimittel-Forschung. Drug Research. (Editio Cantor Verlag,, Vol/p/yr: 22,569, 1972

Acute toxicity, LD50, Intravenous, Dog, 2.000 GM/KG.

Result:

Behavioral: Convulsions or effect on seizure threshold.

Behavioral: Ataxia.

Lungs, Thorax, or Respiration: Dyspnea.

- Arzneimittel-Forschung. Drug Research. (Editio Cantor Verlag,, Vol/p/yr: 22,569, 1972

Acute toxicity, LD50, Oral, Species: Rabbit, 5700. MG/KG.

Result:

Behavioral: Tremor.

Behavioral: Convulsions or effect on seizure threshold.

Blood:Other changes.

- Arzneimittel-Forschung. Drug Research. (Editio Cantor Verlag,, Vol/p/yr: 22,569, 1972

Acute toxicity, LD50, Skin, Species: Rabbit, 13.00 GM/KG.

Result:

Behavioral: Tremor.

Behavioral: Convulsions or effect on seizure threshold.

- Raw Material Data Handbook, Vol.1: Organic Solvents, 1974., National Assoc. of Printing Ink Research Institute, Francis McDonald Sinclair Memorial Labor, Lehigh Univ.,



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Bethlehem, PA 18015, Vol/p/yr: 1,105, 1974

Acute toxicity, LD50, Subcutaneous, Species: Rabbit, 5.000 GM/KG.

Behavioral: Alteration of classical conditioning.

- Arzneimittel-Forschung. Drug Research. (Editio Cantor Verlag,, Vol/p/yr: 22,569, 1972

Acute toxicity, LD50, Intravenous, Species: Rabbit, 1200. MG/KG.

Result:

Behavioral: Change in motor activity (specific assay).

- Arzneimittel-Forschung. Drug Research. (Editio Cantor Verlag., Vol/p/yr: 22,569, 1972

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)

No data available. Skin: Rabbit.

Result: No skin irritation -4. Corrosive after 3 to 1 of exposure. (OECD Test Guideline

-20) Eyes: Corrosive to eyes -7.

No data available. Buehler Test: Species: Guinea pig. Sensitization:

Did not cause sensitisation on laboratory animals. Maximisation Test. Result:

Tumorigenic:Tumors at site or application. Causes. Sensitisation. May cause allergic

skin reaction.

Chronic Toxicological May cause drowsiness or dizziness.

Effects:

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

Specific target organ toxicity -single exposure (Globally Harmonized System) Inhalation:

May cause respiratory irritation.

Carcinogenicity/Other IARC: Group 1 - Carcinogenic to humans 1.

Information:

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
78-93-3	2- Butonone	n.a.	n.a.	n.a.	n.a.
67-56-1	Methanol	n.a.	n.a.	n.a.	n.a.
80-05-7	4,4'-Isopropylidenediphenol	n.a.	n.a.	n.a.	n.a.
2807-30-9	Ethylene glycol monopropyl ether	n.a.	n.a.	n.a.	n.a.
50-00-0	Formaldehyde	Known	1	A2	Yes
107-98-2	2-Propanol, 1-Methoxy-	n.a.	n.a.	n.a.	n.a.
872-50-4	N-Methyl-2-pyrrolidone	n.a.	n.a.	n.a.	n.a.
8047-99-2	Toluene ethylsulfonamide	n.a.	n.a.	n.a.	n.a.
108-94-1	Cyclohexanone	n.a.	3	A3	n.a.
7790-69-4	Lithium nitrate	n.a.	n.a.	n.a.	n.a.
8005-02-5	Black dye	n.a.	n.a.	n.a.	n.a.
122-39-4	Diphenylamine	n.a.	n.a.	A4	n.a.



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Section 12. Ecological Information

12.1 Toxicity: No data available.

12.2 Persistence and No data available. Biodegradability aerobic -Exposure time 28 d Result: 89 % -Readily

Degradability: biodegradable.

12.3 Bioaccumulative No data available. Bioaccumulation: Cyprinus carpio (Carp): -42

Potential: Bioconcentration factor (BCF): 20 -67

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and PBT/vPvB assessment not available as chemical safety assessment not required/not

vPvB assessment: conducted.

12.6 Other adverse effects: No data available. An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

Harmful to aquatic life.

Section 13. Disposal Considerations

13.1 Waste Disposal

Product.

Method:

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

GHS Classification: Flammable Liquids, Category 2 - Danger! Highly flammable liquid and vapor

Serious Eye Damage/Eye Irritation, Category 2A - Warning! Causes serious eye irritation Specific Target Organ Toxicity (single exposure), Category 3 - Warning! May cause

respiratory irritation, or may cause drowsiness and dizziness

Specific Target Organ Toxicity (single exposure), Category 1 - Danger! Causes damage

to organs {<target organs>}

Skin Sensitization, Category 1 - Warning! May cause an allergic skin reaction

Toxic To Reproduction, Category 2 - Warning! Suspected of damaging fertility or the

unborn child

Acute Toxicity: Skin, Category 4 - Warning! Harmful in contact with skin

Flammable Liquids, Category 4 - Warning! Combustible liquid Carcinogenicity, Category 1A - Danger! May cause cancer

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Printing ink, [flammable or] Printing ink related material [(including printing ink

thinning or reducing compound), flammable]

DOT Hazard Class: 3 FLAMMABLE LIQUID

UN/NA Number: 1210 II



14.1 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:

Hazard Class: 3 - FLAMMABLE LIQUID TDG Classification:



CAS#

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S. 313 (TRI)

14.1 LAND TRANSPORT (European ADR/RID):

Printing ink, [flammable or] Printing ink related material [(including printing ink ADR/RID Shipping Name:

thinning or reducing compound), flammable]

Ш **UN Number:** 1210 **Packing Group:**

Hazard Class: 3 - FLAMMABLE LIQUID

14.3 AIR TRANSPORT (ICAO/IATA):

Printing ink, [flammable or] Printing ink related material [(including printing ink ICAO/IATA Shipping Name:

thinning or reducing compound), flammable]

1210 Ш **UN Number: Packing Group:**

Hazard Class: 3 - FLAMMABLE LIQUID

Section 15. Regulatory Information

S. 302 (EHS)

S. 304 RQ

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists **Hazardous Components (Chemical Name)**

CAS#	nazardous Components (Chemical Name)	S. 302 (ERS)	5. 304 KQ	5. 313 (1RI)
78-93-3	2- Butonone	No	Yes NA	No
67-56-1	Methanol	No	Yes NA	Yes
80-05-7	4,4'-Isopropylidenediphenol	No	No	Yes
2807-30-9	Ethylene glycol monopropyl ether	No	No	Yes-Cat. N230
50-00-0	Formaldehyde	Yes 500 LB	Yes NA	Yes
107-98-2	2-Propanol, 1-Methoxy-	No	No	No
872-50-4	N-Methyl-2-pyrrolidone	No	No	Yes
8047-99-2	Toluene ethylsulfonamide	No	No	No
108-94-1	Cyclohexanone	No	Yes NA	No
7790-69-4	Lithium nitrate	No	No	Yes-Cat. N511
8005-02-5	Black dye	No	No	No
122-39-4	Diphenylamine	No	No	Yes
CAS#	Hazardous Components (Chemical Name)	Canadian NPRI	Canadian Toxic	Canadian DSL
78-93-3	2- Butonone	Yes: Part 5	No	Yes
67-56-1				
07 00 1	Methanol	Yes: Part 5		Yes
80-05-7	Methanol 4,4'-Isopropylidenediphenol	Yes: Part 5 Yes: Part 1B	Yes - 96.	Yes Yes
			Yes - 96.	
80-05-7	4,4'-Isopropylidenediphenol		Yes - 96. Yes - 58	Yes
80-05-7 2807-30-9	4,4'-Isopropylidenediphenol Ethylene glycol monopropyl ether	Yes: Part 1B		Yes Yes
80-05-7 2807-30-9 50-00-0	4,4'-Isopropylidenediphenol Ethylene glycol monopropyl ether Formaldehyde	Yes: Part 1B Yes: Part 5	Yes - 58	Yes Yes Yes
80-05-7 2807-30-9 50-00-0 107-98-2	4,4'-Isopropylidenediphenol Ethylene glycol monopropyl ether Formaldehyde 2-Propanol, 1-Methoxy-	Yes: Part 1B Yes: Part 5 No	Yes - 58	Yes Yes Yes Yes
80-05-7 2807-30-9 50-00-0 107-98-2 872-50-4	4,4'-Isopropylidenediphenol Ethylene glycol monopropyl ether Formaldehyde 2-Propanol, 1-Methoxy- N-Methyl-2-pyrrolidone	Yes: Part 1B Yes: Part 5 No Yes: Part 1A	Yes - 58 No	Yes Yes Yes Yes
80-05-7 2807-30-9 50-00-0 107-98-2 872-50-4 8047-99-2	4,4'-Isopropylidenediphenol Ethylene glycol monopropyl ether Formaldehyde 2-Propanol, 1-Methoxy- N-Methyl-2-pyrrolidone Toluene ethylsulfonamide	Yes: Part 1B Yes: Part 5 No Yes: Part 1A No	Yes - 58 No	Yes Yes Yes Yes Yes Yes Yes
80-05-7 2807-30-9 50-00-0 107-98-2 872-50-4 8047-99-2 108-94-1	4,4'-Isopropylidenediphenol Ethylene glycol monopropyl ether Formaldehyde 2-Propanol, 1-Methoxy- N-Methyl-2-pyrrolidone Toluene ethylsulfonamide Cyclohexanone	Yes: Part 1B Yes: Part 5 No Yes: Part 1A No	Yes - 58 No	Yes Yes Yes Yes Yes Yes Yes Yes
80-05-7 2807-30-9 50-00-0 107-98-2 872-50-4 8047-99-2 108-94-1 7790-69-4 8005-02-5 122-39-4	4,4'-Isopropylidenediphenol Ethylene glycol monopropyl ether Formaldehyde 2-Propanol, 1-Methoxy- N-Methyl-2-pyrrolidone Toluene ethylsulfonamide Cyclohexanone Lithium nitrate	Yes: Part 1B Yes: Part 5 No Yes: Part 1A No No	Yes - 58 No No No	Yes

California Proposition 65



This product can expose you to chemicals including Formaldehyde and Styrene, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov. This product can expose you to chemicals including Methanol; Bisphenol A (BPA) and N-Methylpyrrolidone, 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.



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CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists
78-93-3	2- Butonone	TSCA: Yes - Inventory; CA PROP.65: No
67-56-1	Methanol	TSCA: Yes - Inventory; CA PROP.65: Yes: RDTox.
80-05-7	4,4'-Isopropylidenediphenol	TSCA: Yes - Inventory; CA PROP.65: Yes: RDTox(F)
2807-30-9	Ethylene glycol monopropyl ether	TSCA: Yes - Inventory; CA PROP.65: No
50-00-0	Formaldehyde	TSCA: Yes - Inventory; CA PROP.65: Yes: Canc.
107-98-2	2-Propanol, 1-Methoxy-	TSCA: Yes - Inventory; CA PROP.65: No
872-50-4	N-Methyl-2-pyrrolidone	TSCA: Yes - Inventory, 6A; CA PROP.65: Yes: RDTox.
8047-99-2	Toluene ethylsulfonamide	TSCA: No; CA PROP.65: No
108-94-1	Cyclohexanone	TSCA: Yes - Inventory; CA PROP.65: No
7790-69-4	Lithium nitrate	TSCA: Yes - Inventory; CA PROP.65: No
8005-02-5	Black dye	TSCA: Yes - Inventory; CA PROP.65: No
122-39-4	Diphenylamine	TSCA: Yes - Inventory, 4 Test, 8A PAIR; CA PROP.65: No
CAS#	Hazardous Components (Chemical Name)	International Regulatory Lists
78-93-3	2- Butonone	Mexico INSQ: Yes - 1193; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 2-542; Japan ISHL: No; Korea ECL: Yes - KE-24094; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: 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)
67-56-1	Methanol	Mexico INSQ: Yes; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 7-322; Japan ISHL: No; Korea ECL: Yes - KE-23193; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: Yes - Cat.; Germany WHCS: Yes - 145: WGK 1; Switzerland Giftliste 1: Yes - G-2063; Switzerland INNS: No; REACH: Yes - 01-2119433307-44: Full, (P)
80-05-7	4,4'-Isopropylidenediphenol	Mexico INSQ: Yes; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 4-123; Japan ISHL: No; Korea ECL: Yes - KE-23982; Philippines ICCS: Yes; Taiwan TCSCA: 166-01 (4); Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 1308: WGK 2; Switzerland Giftliste 1: Yes - G-2163; Switzerland INNS: Yes; REACH: Yes - 01-2119457856-23: Full, (P)
2807-30-9	Ethylene glycol monopropyl ether	Mexico INSQ: No; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 7-97; Japan ISHL: No; Korea ECL: Yes - KE-29764; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 1771: WGK 1; Switzerland Giftliste 1: Yes - G-2809; Switzerland INNS: No; REACH: Yes - 01-2119883539-19: Full, (P)
50-00-0	Formaldehyde	Mexico INSQ: Yes; Australia ICS: Yes; New Zealand IOC: Yes - cp; China IECSC: Yes; Japan ENCS: Yes - 7-322; Japan ISHL: Yes - 2-(8)-379; Korea ECL: Yes - KE-17074; Philippines ICCS: Yes; Taiwan TCSCA: 066-01 (2,3); Singapore HSL: Yes - 29121110; Israel HSL: No; Germany WHCS: Yes - 112: WGK 2; Switzerland Giftliste 1: Yes - G-2063; Switzerland INNS: No; REACH: Yes - 01-2119488953-20: Full, (P)
107-98-2	2-Propanol, 1-Methoxy-	Mexico INSQ: Yes - 3092; Australia ICS: Yes; New Zealand



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IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 7-97; Japan ISHL: No; Korea ECL: Yes - KE-23379; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 1597: WGK 1; Switzerland Giftliste 1: Yes - G-2805; Switzerland INNS: No; REACH: Yes - 01-2119457435-35: Full, (P)

Mexico INSQ: Yes; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 5-113; Japan ISHL: 8-(1)-1014; Korea ECL: Yes - KE-25324; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 1181: WGK 1; Switzerland Giftliste 1: Yes - G-2530; Switzerland INNS: No; REACH: Yes - 01-2119472430-46: Full, (P), T2

Mexico INSQ: No; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 3-1929; Japan ISHL: No; Korea ECL: Yes - KE-14073; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: No; Switzerland Giftliste 1: No; Switzerland INNS: No; REACH: Yes - 01-2120791115-55: Full, (P)

Mexico INSQ: Yes - 1915; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 3-2376; Japan ISHL: No; Korea ECL: Yes - KE-09188; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 64: WGK 1; Switzerland Giftliste 1: Yes - G-1458; Switzerland INNS: No; REACH: Yes - 01-2119453616-35: Full, (P)

Mexico INSQ: Yes - 2722; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 1-765; Japan ISHL: No; Korea ECL: Yes - KE-22582; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 7389: WGK 1; Switzerland Giftliste 1: Yes - G-8217; Switzerland INNS: No; REACH: Yes - 01-2119968667-16: Full, (P)

Mexico INSQ: No; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 5-5224; Japan ISHL: No; Korea ECL: Yes - KE-08507; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: No; Switzerland Giftliste 1: Yes - G-2630; Switzerland INNS: No; REACH: Yes - (P)

Mexico INSQ: Yes; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 3-133; Japan ISHL: 4-(12)-219; Korea ECL: Yes - KE-28303; Philippines ICCS: Yes; Taiwan TCSCA: 115-01 (4); Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 726: WGK 3; Switzerland Giftliste 1: Yes - G-1586; Switzerland INNS: No;

REACH: Yes - 01-2120771905-44: Full, (P)

872-50-4 N-Methyl-2-pyrrolidone

8047-99-2 Toluene ethylsulfonamide

108-94-1 Cyclohexanone

7790-69-4 Lithium nitrate

8005-02-5 Black dye

122-39-4 Diphenylamine



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Section 16. Other Information

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Additional Information About No data available.

This Product:

Company Policy or

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