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: N100504

Product Name: JP-Y109

X Code: X(22,53)0504

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
Elk Grove Village, IL 60007
Phone Number: (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
Specific Target Organ Toxicity (single exposure), Category 1
Skin Sensitization, Category 1
Germ Cell Mutagenicity, Category 1B
Toxic To Reproduction, Category 1B
Aspiration Toxicity, Category 1
Specific Target Organ Toxicity (repeated exposure), Category 2
Carcinogenicity, Category 1B

2.2 Label Elements:

GHS Signal Word: **Danger**

Hazard-determining components of labelling:

2- Butonone
Methanol
Silane, Diethoxymethyl[3-(oxiranylmethoxy)propyl]-
SC-100 Solvent
Ethylbenzene

GHS Hazard Phrases:

H225 - Highly flammable liquid and vapor.
H304 - May be fatal if swallowed and enters airways.
H317 - May cause an allergic skin reaction.
H340 - May cause genetic defects .
H350 - May cause cancer .
H360 - May damage fertility or the unborn child .
H370 - Causes damage to organs
H373 - May cause damage to 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.
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:

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.
P308+311 - If exposed of concerned: Call a POISON CENTER/Doctor/...
P313 - Get medical advice/attention.
P314 - Get medical attention/advice if you feel unwell.
P321 - Specific treatment see ... on this label.
P331 - Do NOT induce vomiting.
P333+313 - If skin irritation or rash occurs, seek medical advice/attention.
P362+364 - Take off contaminated clothing and wash it before reuse.
P370+378 - In case of fire, use ... to extinguish.

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 Effects and Symptoms: Hazards not otherwise classified (HNOC) or not covered by GHS. Hazards not otherwise classified (HNOC) or not covered by GHS -none. ROUTE OF EXPOSURE: Multiple Routes: Harmful if swallowed, inhaled, or absorbed through skin.

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	2- Butonone 01-2119457290-43	50.0 -65.0 %	201-159-0 606-002-00-3	Flam. Liq. 2: H225 Eye Damage 2: H319 STOT (SE) 3: H336 EUH066
67-56-1	Methanol 01-2119392409-28	2.7 -7.0 %	200-659-6 603-001-00-X	Flam. Liq. 2: H225 Acute Tox.(O) 3: H301 Acute Tox.(D) 3: H311 Acute Tox.(I) 3: H331 STOT (SE) 1: H370
2897-60-1	Silane, Diethoxymethyl[3-(oxiranylmethoxy)propyl]- 01-2120120420-79	0.5 -5.0 %	220-780-8 NA	Skin Corr. 2: H315 Skin Sens. 1: H317 Eye Damage 2: H319 STOT (SE) 3: H335 Mutagen 2: H341

2530-83-8	3-Glycidoxypropyltrimethoxysilane 01-2119513212-58	0.5 -5.0 %	219-784-2 NA	Eye Damage 1: H318
114697-07-3	Silsesquioxanes, Ph Pr, hydroxy-terminated	0.9 -5.0 %	NA NA	Eye Damage 2A: H319
9004-36-8	Cellulose ester na	0.1 -1.0 %	NA NA	No GHS classifications apply.
110-43-0	2-Heptanone 01-2119902391-49	0.5 -3.0 %	203-767-1 606-024-00-3	Flam. Liq. 3: H226 Acute Tox.(O) 4: H302 Acute Tox.(I) 4: H332
64742-95-6	SC-100 Solvent 01-2119455851-35	0.05 -0.375 %	265-199-0 649-356-00-4	Asp. Toxic. 1: H304 Mutagen 1B: H340 Carcinogen 1B: H350
100-41-4	Ethylbenzene 01-2119489370-35	0.005 -0.15 %	202-849-4 601-023-00-4	Flam. Liq. 2: H225 Acute Tox.(I) 4: H332 STOT (RE) 2: H373 Asp. Toxic. 1: H304
108-65-6	Propylene glycol methyl ether acetate 01-2119475791-29	0.946 -5.47 %	203-603-9 607-195-00-7	Flam. Liq. 3: H226

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. If inhaled, remove to fresh air. If breathing is difficult, give oxygen.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician. Take victim immediately to hospital.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Flush eyes with water as a precaution. Assure adequate flushing of the eyes by separating the eyelids with fingers.

In Case of Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. If swallowed, wash out mouth with water provided person is conscious. Call 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 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

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. Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

5.2 Flammable Properties and Hazards: Carbon oxides,
Flash back possible over considerable distance. Container explosion may occur under fire conditions. No data available.

No data available.

Flash Pt: > -2.99 C Method Used: Estimate

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

Autoignition Pt: ~ 385.00 C

5.3 Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary.
Further information. Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

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. Wear respiratory protection.

6.2 Environmental Precautions: 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: 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).

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). PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL. Evacuate area. PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Methods for cleaning up.
Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

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. User Exposure: Do not breathe vapor. Do not get in eyes, on skin, on clothing.

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. Hygroscopic.
Storage class 510) Recommended storage temperature: 2 -8 - 8 deg.C.
Suitable: Keep tightly closed. Store in a cool, dry place. Storage class 510): Combustible liquids Non Combustible.

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 Exposure 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
110-43-0	2-Heptanone	ACGIH TLV	TLV: 50 ppm	
		Europe	TWA: 238 mg/m3 (50 ppm) STEL: 475 mg/m3 (100 ppm)	Skin Absorption
		France VL	TWA: 238 mg/m3 (50 ppm) STEL: 475 mg/m3 (100 ppm)	
		OSHA PELs	PEL: 100 ppm	
		Britain EH40	TWA: 237 mg/m3 (50 ppm) STEL: 475 mg/m3 (100 ppm)	Skin Absorption
100-41-4	Ethylbenzene	ACGIH TLV	TLV: 20 ppm STEL: 125 ppm	
		Europe	TWA: 442 mg/m3 (100 ppm) STEL: 884 mg/m3 (200 ppm)	Skin Absorption
		France VL	TWA: 88.4 mg/m3 (20 ppm) STEL: 442 mg/m3 (100 ppm)	
		OSHA PELs	PEL: 100 ppm	
		Britain EH40	TWA: 441 mg/m3 (100 ppm) STEL: 552 mg/m3 (125 ppm)	Skin Absorption
108-65-6	Propylene glycol methyl ether acetate	Europe	TWA: 275 mg/m3 (50 ppm) STEL: 550 mg/m3 (100 ppm)	Skin Absorption
		France VL	TWA: 275 mg/m3 (50 ppm) STEL: 550 mg/m3 (100 ppm)	
		Britain EH40	TWA: 274 mg/m3 (50 ppm) STEL: 548 mg/m3 (100 ppm)	Skin Absorption

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. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Use only in a chemical fume hood. Safety shower and eye bath.

8.2.2 Personal protection equipment:

Eye Protection: Face shield and safety glasses. Tightly fitting safety goggles. Faceshield (8-inch minimum). 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. 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. 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: Nitrile rubber, Minimum layer thickness: 0.4 mm, Break through time: 480 min.

Other Protective Clothing: Impervious clothing. Flame retardant antistatic protective clothing. Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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). Respiratory: Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

Work/Hygienic/Maintenance Practices: Wash thoroughly after handling. Wash contaminated clothing before reuse. Discard contaminated shoes. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.3 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.

Exposure Scenarios: No data available.

Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	liquid. Color: yellow. solvent odor.
pH:	No data.
Melting Point:	-97.80 C - -86.99 C
Boiling Point:	64.50 C - 146.00 C
Flash Pt:	> -2.99 C Method Used: Estimate

Evaporation Rate:	No data.
Saturated Vapor Concentration:	No data.
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	No data.
	No data.
Vapor Density (vs. Air = 1):	> Air
Specific Gravity (Water = 1):	No data.
Density:	~ 0.9036 G/ML (~ 7.54 - LB/GA)
Solubility in Water:	Miscible
Octanol/Water Partition Coefficient:	No data.
Autoignition Pt:	~ 385.00 C
Decomposition Temperature:	No data.
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 - Hazardous Reactions:**	Vapors may form explosive mixture with air. No data available.
	Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
10.4	**Conditions To Avoid - Instability:**	Exposure to moisture. Heat, flames and sparks. Extremes of temperature and direct sunlight. No data available.
10.5	**Incompatibility - Materials To Avoid:**	Oxidizing agents, Strong reducing agents, Strong oxidizing agents. Strong oxidizing agents, Bases, Oxidizing agents.
10.6	**Hazardous Decomposition or Byproducts:**	No data available. In the event of fire: see section 5. Hazardous decomposition products formed under fire conditions. -Carbon oxides. Carbon monoxide, HAZARDOUS DECOMPOSITION PRODUCTS. silicon oxides, Reacts with water to form methanol. Methanol is given off during processing and by reaction with water. Other decomposition products:

Section 11. Toxicological Information

11.1 Information on Toxicological Effects:

Acute toxicity.

Germ cell mutagenicity. No data available.
Reproductive toxicity. Aspiration hazard: Inhalation: Dermal. Specific target organ toxicity - single exposure: Specific target organ toxicity - repeated exposure:
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.
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

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

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 . No data available. Serious eye damage/eye irritation no data available.
Serious eye damage/eye irritation: Eyes: Rabbit.
Provide adequate ventilation.

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

Chronic Toxicological Effects: Specific target organ toxicity - single exposure: May cause drowsiness or dizziness.
Specific target organ toxicity -repeated exposure: no data available. No data available.
Specific target organ toxicity -single exposure (Globally Harmonized System)

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	2- Butonone	n.a.	n.a.	n.a.	n.a.
67-56-1	Methanol	n.a.	n.a.	n.a.	n.a.
2897-60-1	Silane, Diethoxymethyl[3-(oxiranylmethoxy)propyl]-	n.a.	n.a.	n.a.	n.a.
2530-83-8	3-Glycidoxypropyltrimethoxysilane	n.a.	n.a.	n.a.	n.a.
114697-07-3	Silsesquioxanes, Ph Pr, hydroxy-terminated	n.a.	n.a.	n.a.	n.a.
9004-36-8	Cellulose ester	n.a.	n.a.	n.a.	n.a.
110-43-0	2-Heptanone	n.a.	n.a.	n.a.	n.a.
64742-95-6	SC-100 Solvent	n.a.	n.a.	n.a.	n.a.
100-41-4	Ethylbenzene	n.a.	2B	A3	n.a.
108-65-6	Propylene glycol methyl ether acetate	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. Biodegradability Result: - - Readily biodegradable. Biodegradability: Biotic/Aerobic - Exposure time 8, Result: 100 % - Readily biodegradable. Biochemical Oxygen Demand (BOD) 0.36 mg/l.

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. Harmful to aquatic life. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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. APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Section 14. Transport Information

GHS Classification:
Flammable Liquids, Category 2 - Danger! Highly flammable liquid and vapor
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
Germ Cell Mutagenicity, Category 1B - Danger! May cause genetic defects
Toxic To Reproduction, Category 1B - Danger! May damage fertility or the unborn child
Aspiration Toxicity, Category 1 - Danger! May be fatal if swallowed and enters airways.
Specific Target Organ Toxicity (repeated exposure), Category 2 - Warning! May cause damage to {<target organs>} through prolonged or repeated exposure
Carcinogenicity, Category 1B - 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: UN1210 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:** II

Hazard Class: 3 - FLAMMABLE LIQUID **TDG Classification:**

14.1 LAND TRANSPORT (European ADR/RID):

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

UN Number: 1210 II

Hazard Class: 3 - FLAMMABLE LIQUID

14.3 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: 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	2- Butonone	No	Yes NA	No
67-56-1	Methanol	No	Yes NA	Yes
2897-60-1	Silane, Diethoxymethyl[3-(oxiranylmethoxy)propyl]-	No	No	No
2530-83-8	3-Glycidoxypropyltrimethoxysilane	No	No	No
114697-07-3	Silsesquioxanes, Ph Pr, hydroxy-terminated	No	No	No
9004-36-8	Cellulose ester	No	No	No
110-43-0	2-Heptanone	No	No	No
64742-95-6	SC-100 Solvent	No	No	No
100-41-4	Ethylbenzene	No	Yes NA	Yes
108-65-6	Propylene glycol methyl ether acetate	No	No	No

CAS #	Hazardous Components (Chemical Name)	Canadian NPRI	Canadian Toxic	Canadian DSL
78-93-3	2- Butonone	Yes: Part 5	No	Yes
67-56-1	Methanol	Yes: Part 5		Yes
2897-60-1	Silane, Diethoxymethyl[3-(oxiranylmethoxy)propyl]-	No	No	Yes - N: Part 1
2530-83-8	3-Glycidoxypropyltrimethoxysilane	No	No	Yes
114697-07-3	Silsesquioxanes, Ph Pr, hydroxy-terminated	No	No	No
9004-36-8	Cellulose ester	No	No	Yes
110-43-0	2-Heptanone	No	No	Yes
64742-95-6	SC-100 Solvent	Yes: Part 5	No	Yes
100-41-4	Ethylbenzene	Yes: Part 1A	No	Yes
108-65-6	Propylene glycol methyl ether acetate	Yes	No	Yes

California Proposition 65

WARNING This product can expose you to chemicals including Ethylbenzene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov. This product can expose you to chemicals including Methanol and Toluene, 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.

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.
2897-60-1	Silane, Diethoxymethyl[3-(oxiranylmethoxy)propyl]-	TSCA: Yes - Inventory, 8A; CA PROP.65: No
2530-83-8	3-Glycidoxypropyltrimethoxysilane	TSCA: Yes - Inventory, 8A; CA PROP.65: No
114697-07-3	Silsesquioxanes, Ph Pr, hydroxy-terminated	TSCA: Yes - Inventory; CA PROP.65: No
9004-36-8	Cellulose ester	TSCA: Yes - Inventory; CA PROP.65: No
110-43-0	2-Heptanone	TSCA: Yes - Inventory; CA PROP.65: No
64742-95-6	SC-100 Solvent	TSCA: Yes - Inventory; CA PROP.65: No
100-41-4	Ethylbenzene	TSCA: Yes - Inventory; CA PROP.65: Yes: Canc.
108-65-6	Propylene glycol methyl ether acetate	TSCA: Yes - Inventory, 8A PAIR, 8D TERM; 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)
2897-60-1	Silane, Diethoxymethyl[3-(oxiranylmethoxy)propyl]-	Mexico INSQ: No; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 2-2072; Japan ISHL: No; Korea ECL: KE-14-0113; Philippines ICCS: No; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: No; Switzerland Giftliste 1: No; Switzerland INNS: No; REACH: Yes - 01-2120120420-79: Full, (P)
2530-83-8	3-Glycidoxypropyltrimethoxysilane	Mexico INSQ: No; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 2-2962; Japan ISHL: No; Korea ECL: Yes - KE-34368; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 2622: WGK 2; Switzerland Giftliste 1: No; Switzerland INNS: No; REACH: Yes - 01-2119513212-58: Full, (P)
114697-07-3	Silsesquioxanes, Ph Pr, hydroxy-terminated	Mexico INSQ: No; Australia ICS: Yes; New Zealand IOC: No; China IECSC: Yes; Japan ENCS: Yes - 7-478; Japan ISHL: No; Korea ECL: Yes - KE-31258; Philippines ICCS: No; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: No; Switzerland Giftliste 1: No; Switzerland INNS: No; REACH: No
9004-36-8	Cellulose ester	Mexico INSQ: Yes; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 8-168; Japan ISHL: No; Korea ECL: Yes - KE-05342; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 7208: WGK 0/nwg; Switzerland Giftliste 1: Yes - G-8394; Switzerland INNS: No; REACH: Yes - (P)
110-43-0	2-Heptanone	Mexico INSQ: Yes - 1110; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 2-542;

		Japan ISHL: No; Korea ECL: Yes - KE-18303; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 3726: WGK 1; Switzerland Giftliste 1: Yes - G-2267; Switzerland INNS: No; REACH: Yes - 01-2119902391-49: Full, (P)
64742-95-6	SC-100 Solvent	Mexico INSQ: Yes; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 9-2578; Japan ISHL: No; Korea ECL: Yes - KE-31662; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 775: WGK 2; Switzerland Giftliste 1: No; Switzerland INNS: No; REACH: Yes - 01-2119486773-24: Full, (P), C2, M2
100-41-4	Ethylbenzene	Mexico INSQ: Yes - 1175; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 3-60; Japan ISHL: No; Korea ECL: Yes - KE-13532; Philippines ICCS: Yes; Taiwan TCSCA: 116-01 (4); Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 99: WGK 1; Switzerland Giftliste 1: Yes - G-1165; Switzerland INNS: No; REACH: Yes - 01-2119489370-35: Full, (P)
108-65-6	Propylene glycol methyl ether acetate	Mexico INSQ: Yes; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - 5-1508; Japan ISHL: Yes - 5-1518; Korea ECL: Yes - KE-23315; Philippines ICCS: Yes; Taiwan TCSCA: Yes; Singapore HSL: No; Israel HSL: No; Germany WHCS: Yes - 5033: WGK 1; Switzerland Giftliste 1: Yes - G-54973; Switzerland INNS: No; REACH: Yes - 01-2119475791-29: Full, (P)

Section 16. Other Information

Revision Date: 03/09/2022

Additional Information About This Product: No data available.

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