

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

- 1.1 Product Code:** JP-K112  
**Product Name:** JP-K112  
**Trade Name:** JP-K112
- 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  
**Web site address:** <http://www.hitachi-america.us/ice/marketing-and-coding>  
**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  
Acute Toxicity: Skin, 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  
Specific Target Organ Toxicity (repeated exposure), Category 2  
Aquatic Toxicity (Acute), Category 2

**2.2 Label Elements:**



**GHS Signal Word:** Danger

**GHS Hazard Phrases:**

- H225 - Highly flammable liquid and vapor.  
H313 - May be harmful in contact with skin.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H370 - Causes damage to  
H336 - May cause drowsiness or dizziness.  
H372 - Causes damage to through prolonged or repeated exposure.  
H373 - May cause damage to through prolonged or repeated exposure.

**GHS Precaution Phrases:**

P233 - Keep container tightly closed.  
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical/ventilating/lighting equipment.  
P243 - Take precautionary measures against static discharge.  
P242 - Use only non-sparking tools.  
P264 - Wash hands thoroughly after handling.  
P362+364 - Take off contaminated clothing and wash it before reuse.  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
P270 - Do not eat, drink or smoke when using this product.  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P271 - Use only outdoors or in a well-ventilated area.

**GHS Response Phrases:**

P370+378 - In case of fire, use ... to extinguish.  
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
P312 - Call a POISON CENTER/doctor/... if you feel unwell.  
P302+352 - IF ON SKIN: Wash with plenty of soap and water.  
P321 - Specific treatment see ... on this label.  
P332+313 - If skin irritation occurs, get medical advice/attention.  
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+313 - If eye irritation persists, get medical advice/attention.  
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P314 - Get medical attention/advice if you feel unwell.

**GHS Storage and Disposal Phrases:**

P403+235 - Store in cool/well-ventilated place.  
P501 - Dispose of contents/container ...  
P405 - Store locked up.  
P403+233 - Store container tightly closed in well-ventilated place.

- 2.3 Adverse Human Health** Chronic: May cause reproductive and fetal effects. Laboratory experiments have shown **Effects and Symptoms:** mutagenic effects. Animal studies have reported the development of tumors. Prolonged exposure may cause liver, kidney, and heart damage. Prolonged or repeated skin contact may cause defatting and dermatitis. Chronic exposure may cause liver damage.
- 2.3.1 Inhalation:** Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation. Inhalation of vapor may cause respiratory tract irritation. May cause effects similar to those described for ingestion. Causes upper respiratory tract irritation. Inhalation of vapors may cause drowsiness and dizziness.
- 2.3.2 Skin Contact:** Causes moderate skin irritation. May cause cyanosis of the extremities. May cause moderate skin irritation. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. May cause irritation with pain and stinging, especially if the skin is abraded. Isopropanol has a low potential to cause allergic skin reactions; however, rare cases of allergic contact dermatitis have been reported. May be absorbed through intact skin. Dermal absorption has been considered toxicologically insignificant. The cases of deep coma associated with skin contact are thought to be a consequence of gross isopropanol vapor inhalation in rooms with inadequate ventilation, rather than being

attributable to percutaneous absorption of isopropanol per se.

**2.3.3 Eye Contact:**

Causes severe eye irritation. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage. May cause moderate eye irritation. May result in corneal injury. Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. May cause transient corneal injury. In the eyes of a rabbit, 0.1 ml of a rabbit, 0.1 ml of 70% isopropyl alcohol caused conjunctivitis, isopropyl alcohol caused conjunctivitis, iritis, and corneal opacity.

**2.3.4 Ingestion:**

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. The probable oral lethal dose in humans is 240 ml (2696 mg/kg), but ingestion of only 20 ml (224 mg/kg) has, but in gestion of only 20 ml (224 mg/kg) has caused poisoning.

**Section 3. Composition/Information on Ingredients**

| CAS #   | Hazardous Components (Chemical Name)/<br>REACH Registration No. | Concentration | EC No./<br>EC Index No.   | GHS Classification   |
|---------|---|---------------|---------------------------|--|
| 64-17-5 | Ethyl alcohol<br>01-2119457610-43                               | 70.0 -80.0 %  | 200-578-6<br>603-002-00-5 | Flam. Liq. 2: H225   |
| 71-23-8 | 1-Propanol<br>01-2119486761-29                                  | 5.0 -15.0 %   | 200-746-9<br>603-003-00-0 | Flam. Liq. 2: H225<br>Eye Damage 1: H318<br>STOT (SE) 3: H335 H336 |
| NA      | Proprietary chrome complex<br>NA                                | 5.0 -10.0 %   | NA<br>NA                  | No GHS classifications apply.                                      |
| 67-63-0 | Isopropyl alcohol<br>01-2119457558-25                           | 5.0 %         | 200-661-7<br>603-117-00-0 | Flam. Liq. 2: H225<br>Eye Damage 2: H319<br>STOT (SE) 3: H335 H336 |

**Section 4. First Aid Measures**

**4.1 Description of First Aid**

**Measures:**

**In Case of Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If inhaled, remove to fresh air.

**In Case of Skin Contact:** Get medical aid. Wash clothing before reuse. Flush skin with plenty of soap and water. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists.

**In Case of Eye Contact:** Get medical aid. Gently lift eyelids and flush continuously with water. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes.

**In Case of Ingestion:** Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid. Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs naturally, have victim lean forward.

**Note for the Doctor:** Treat symptomatically and supportively. Persons with skin or eye disorders or liver, kidney, chronic respiratory diseases, or central and peripheral nervous system diseases may be at increased risk from exposure to this substance.  
Antidote: Replace fluid and electrolytes. Urine acetone test may be helpful in diagnosis. Hemodialysis should be considered in severe intoxication.

## Section 5. Fire Fighting Measures

- 5.1 Suitable Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. Use dry chemical, carbon dioxide, or alcohol-resistant foam. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. For small fires, use carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out.
- 5.2 Flammable Properties and Hazards:**  
**Flash Pt:** 11.70 C (53.1 F) Method Used: Estimate  
**Explosive Limits:** LEL: UEL:  
**Autoignition Pt:** > 350.00 C (662.0 F)
- 5.3 Fire Fighting Instructions:** Replace fluid and electrolytes. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Get medical aid. Combustion generates toxic fumes. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Flammable liquid and vapor. May form explosive peroxides. Vapors are heavier than air and may travel to a source of ignition and flash back.

## Section 6. Accidental Release Measures

- 6.1 Protective Precautions, Protective Equipment and Emergency Procedures:**
- 6.2 Environmental Precautions:**
- 6.3 Methods and Material For Containment and Cleaning Up:** Use proper personal protective equipment as indicated in Section 8.  
Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Use water spray to disperse the gas/vapor. Use water spray to dilute spill to a non-flammable mixture.

**Section 7. Handling and Storage**

- 7.1 Precautions To Be Taken in Handling:** Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not get on skin or in eyes. Do not ingest or inhale. Take precautionary measures against static discharges. Use only with adequate ventilation. Avoid breathing dust, mist, or vapor. Do not allow to evaporate to near dryness.
- 7.2 Precautions To Be Taken in Storing:** Keep away from heat, sparks and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Do not store near perchlorates, peroxides, chromic acid or nitric acid. Do not store near combustible materials. Store in a cool, dry place. Do not store in direct sunlight. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. Addition of water or appropriate reducing materials will lessen peroxide formation. Store protected from moisture. Containers should be dated when opened and tested periodically for the presence of peroxides. Should crystals form in a peroxidizable liquid, peroxidation may have occurred and the product should be considered extremely dangerous. In this instance, the container should only be opened remotely by professionals. All peroxidizable substances should be stored away from heat and light and be protected from ignition sources.

**Section 8. Exposure Controls/Personal Protection**

**8.1 Exposure Parameters:**

| CAS #   | Chemical Name     | Jurisdiction | Recommended Exposure Limits                               | Notations       |
|---------|-------------------|--------------|---|-----------------|
| 64-17-5 | Ethyl alcohol     | ACGIH TLV    | TLV: 1000 ppm   |                 |
|         |                   | France VL    | TWA: 1900 mg/m3 (1000 ppm)<br>STEL: 9500 mg/m3 (5000 ppm) |                 |
|         |                   | OSHA PELs    | PEL: 1000 ppm   |                 |
|         |                   | Britain EH40 | TWA: 1920 mg/m3 (1000 ppm)<br>STEL: ()                    |                 |
| 71-23-8 | 1-Propanol        | ACGIH TLV    | TLV: 200 ppm<br>STEL: (250 ppm)                           |                 |
|         |                   | France VL    | TWA: 500 mg/m3 (200 ppm)                                  |                 |
|         |                   | OSHA PELs    | PEL: 200 ppm  |                 |
|         |                   | Britain EH40 | TWA: 500 mg/m3 (200 ppm)<br>STEL: 625 mg/m3 (250 ppm)     | Skin Absorption |
| 67-63-0 | Isopropyl alcohol | ACGIH TLV    | TLV: 200 ppm<br>STEL: 400 ppm                             |                 |
|         |                   | France VL    | STEL: 980 mg/m3 (400 ppm)                                 |                 |
|         |                   | OSHA PELs    | PEL: 400 ppm  |                 |
|         |                   | Britain EH40 | TWA: 999 mg/m3 (400 ppm)<br>STEL: 1250 mg/m3 (500 ppm)    |                 |

**8.2 Exposure Controls:**

**8.2.1 Engineering Controls (Ventilation etc.):** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**8.2.2 Personal protection equipment:**

**Eye Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Wear chemical splash goggles.

**Protective Gloves:** Wear appropriate protective gloves to prevent skin exposure. Wear appropriate gloves to prevent skin exposure.

**Other Protective Clothing:** Wear appropriate protective clothing to prevent skin exposure. Wear appropriate protective clothing to minimize contact with skin.

**Respiratory Equipment (Specify Type):** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

**Section 9. Physical and Chemical Properties**

**9.1 Information on Basic Physical and Chemical Properties**

**Physical States:** [ ] Gas [ X ] Liquid [ ] Solid

**Appearance and Odor:** Black.  
alcohol-like.

**pH:**

**Melting Point:** -127.00 C (-196.6 F) - -88.00 C (-126.4 F)

**Boiling Point:** 78.00 C (172.4 F) - 97.00 C (206.6 F)

**Flash Pt:** 11.70 C (53.1 F) Method Used: Estimate

**Evaporation Rate:**

**Flammability (solid, gas):**

**Explosive Limits:** LEL: UEL:

**Vapor Pressure (vs. Air or mm Hg):**

**Vapor Density (vs. Air = 1):**

**Specific Gravity (Water = 1):**

**Density:** ~ 0.8040 G/CM3

**Solubility in Water:**

**Octanol/Water Partition Coefficient:**

**Autoignition Pt:** > 350.00 C (662.0 F)

**Decomposition Temperature:**

**Viscosity:**

**9.2 Other Information**

**Percent Volatile:**

**Section 10. Stability and Reactivity**

- 10.1 Reactivity:**
- 10.2 Stability:** Unstable [ ] Stable [ X ]
- 10.3 Conditions To Avoid - Hazardous Reactions:**  
**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]
- 10.4 Conditions To Avoid - Instability:** Incompatible materials, Ignition sources. Excess heat. Light.
- 10.5 Incompatibility - Materials To Avoid:** Strong oxidizing agents, acids, Alkali metals, Ammonia, hydrazine, Peroxides, Sodium, Acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, Perchloric acid, silver nitrate, mercuric nitrate, potassium tert-butoxide, magnesium perchlorate, Acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, Oxidizing agents, Strong acids, Strong bases, Amines, ethylene oxide, isocyanates, acetaldehyde, chlorine, phosgene, Attacks some forms of plastics, rubbers, and coatings. aluminum at high temperatures.
- 10.6 Hazardous Decomposition or Byproducts:** Carbon monoxide, irritating and toxic fumes and gases.

**Section 11. Toxicological Information**

- 11.1 Information on Toxicological Effects:**  
**Carcinogenicity/Other Information:** CAS# 64-17-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 71-23-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 67-63-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

| CAS #   | Hazardous Components (Chemical Name) | NTP  | IARC | ACGIH | OSHA |
|---------|--------------------------------------|------|------|-------|------|
| 64-17-5 | Ethyl alcohol                        | n.a. | 1    | A4    | n.a. |
| 71-23-8 | 1-Propanol                           | n.a. | n.a. | n.a.  | n.a. |
| NA      | Proprietary chrome complex           | n.a. | n.a. | n.a.  | n.a. |
| 67-63-0 | Isopropyl alcohol                    | n.a. | 3    | A4    | n.a. |

**Section 12. Ecological Information**

- 12.1 Toxicity:**
- Environmental: When released to the atmosphere it will photodegrade in hours (polluted urban atmosphere) to an estimated range of 4 to 6 days in less polluted areas. Rainout should be significant.
- Physical: No information available.  
Expected to rapidly volatilize.
- Other: No information available. Ecotoxicity: Fish: Fathead Minnow: 1000 ppm; 96h; LC50Daphnia: 1000 ppm; 96h; LC50Fish: Gold orfe: 8970-9280 ppm; 48h; LC50 IPA has a high biochemical oxygen demand and a potential to cause oxygen depletion in aqueous systems, a low potential to affect aquatic organisms, a low potential to affect secondary waste treatment microbial metabolism, a low potential to affect the germination of some plants, a high potential to biodegrade (low persistence) with unacclimated microorganisms from activated sludge.
- No information available.

Physical: THOD: 2.40 g oxygen/gCOD: 2.23 g oxygen/gBOD-5: 1.19-1.72 g oxygen/g.

- 12.2 Persistence and Degradability:
- 12.3 Bioaccumulative Potential:
- 12.4 Mobility in Soil:
- 12.5 Results of PBT and vPvB assessment:
- 12.6 Other adverse effects:

### Section 13. Disposal Considerations

- 13.1 Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.  
RCRA P-Series: None listed.  
RCRA U-Series: None listed.

### Section 14. Transport Information

**14.1 LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** METHANOL. N-PROPANOL. ISOPROPANOL.  
**DOT Hazard Class:** 3 FLAMMABLE LIQUID  
**UN/NA Number:** UN1210 **Packing Group:** II



**14.1 LAND TRANSPORT (Canadian TDG):**

**TDG Shipping Name:** METHANOL. No information available. ISOPROPANOL.  
**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

### 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) |
|---------|--------------------------------------|--------------|-----------|--------------|
| 64-17-5 | Ethyl alcohol                        | No           | No        | No           |
| 71-23-8 | 1-Propanol                           | No           | No        | No           |
| NA      | Proprietary chrome complex           | No           | No        | No           |
| 67-63-0 | Isopropyl alcohol                    | No           | No        | Yes          |



**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 type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Aspiration Hazard  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Gas under pressure (compressed gas)               | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Simple Asphyxiant  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | In contact with water emits flammable gas         | <input checked="" type="checkbox"/> Yes <input 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) |   |  |

| <b>CAS #</b> | <b>Hazardous Components (Chemical Name)</b> | <b>Canadian NPRI</b>  | <b>Canadian Toxic</b> | <b>Canadian DSL</b> |
|--------------|---|---|-----------------------|---------------------|
| 64-17-5      | Ethyl alcohol                               | Yes: Part 5   |                       | Yes                 |
| 71-23-8      | 1-Propanol                                  | No  | No                    | Yes                 |
| NA           | Proprietary chrome complex                  | No  | No                    | No                  |
| 67-63-0      | Isopropyl alcohol                           | Yes: Part 5   |                       | Yes                 |
| <b>CAS #</b> | <b>Hazardous Components (Chemical Name)</b> | <b>Other US EPA or State Lists</b>  |                       |                     |
| 64-17-5      | Ethyl alcohol                               | TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8; NC TAP: No   |                       |                     |
| 71-23-8      | 1-Propanol                                  | TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8; NC TAP: No   |                       |                     |
| NA           | Proprietary chrome complex                  | TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; NC TAP: No   |                       |                     |
| 67-63-0      | Isopropyl alcohol                           | TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC: Cat. IIb, Title 8; NC TAP: No  |                       |                     |
| <b>CAS #</b> | <b>Hazardous Components (Chemical Name)</b> | <b>International Regulatory Lists</b>   |                       |                     |
| 64-17-5      | Ethyl alcohol                               | Mexico INSQ: Yes; Australia ICS: Yes; New Zealand IOC: Yes; Japan ENCS: Yes - 5-153; Japan ISHL: No; Israel HSL: Yes - Cat.; Germany WHCS: Yes - 96: WGK 1; Switzerland Giftliste 1: Yes - G-1158; Switzerland INNS: No; REACH: Yes - 01-2119457610-43: Full, (P); Rotterdam: No                      |                       |                     |
| 71-23-8      | 1-Propanol                                  | Mexico INSQ: Yes - 1274; Australia ICS: Yes; New Zealand IOC: Yes; Japan ENCS: Yes - 2-207; Japan ISHL: No; Israel HSL: No; Germany WHCS: Yes - 176: WGK 1; Switzerland Giftliste 1: Yes - G-2043; Switzerland INNS: No; REACH: Yes - 01-2119486761-29: Full, (P); Rotterdam: No                      |                       |                     |
| NA           | Proprietary chrome complex                  | 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: Yes - (P); Rotterdam: No   |                       |                     |
| 67-63-0      | Isopropyl alcohol                           | Mexico INSQ: Yes - 1219; Australia ICS: Yes; New Zealand IOC: Yes; Japan ENCS: Yes - 2-207; Japan ISHL: Yes - 2-(8)-319; Israel HSL: Yes - Cat.; Germany WHCS: Yes - 135: WGK 1; Switzerland Giftliste 1: Yes - G-1712; Switzerland INNS: No; REACH: Yes - 01-2119457558-25: Full, (P); Rotterdam: No |                       |                     |

**Canadian WHMIS Classification:**



CLASS B, DIVISION 2: Flammable Liquids  
CLASS D, DIVISION 2, SUBDIVISION A: Very Toxic Materials (carcinogens, reproductive toxicity, etc.)

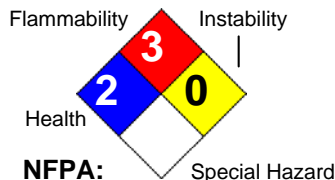
**Section 16. Other Information**

**Revision Date:** 11/14/2018

**Hazard Rating System:**

|                     |  |          |
|---------------------|--|----------|
| <b>HEALTH</b>       |  | <b>2</b> |
| <b>FLAMMABILITY</b> |  | <b>3</b> |
| <b>PHYSICAL</b>     |  | <b>0</b> |
| <b>PPE</b>          |  | <b>B</b> |

**HMIS:**



**Additional Information About**

**This Product:**

**Company Policy or**

**Disclaimer:**

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.

Hitachi Contact Information:

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