

This SDS complies with the US OSHA HCS 2012.

### 1. Product and Company Identification

**Product Name:** JP-E410, 2410E  
**Company Name:** Hitachi Industrial Equipment & Solutions America, LLC  
 75 NW Point Blvd Suite D,  
 Elk Grove Village, IL 60007  
**Phone Number:** (800)627-5464  
**Web site address:** <https://mc.hitachi-iesa.com>  
**Emergency Contact:** Chemtrec (800)424-9300

**Intended Use:** Printing ink for industrial inkjet printers.

### 2. Hazards Identification

**Flammable Liquids, Category 2**

**Serious Eye Damage/Eye Irritation, Category 2**

**Specific Target Organ Toxicity (single exposure), Category 3**



**GHS Signal Word:**

**Danger**

**GHS Hazard Phrases:**

EUH066 - Repeated exposure may cause skin dryness or cracking.  
 H225 - Highly flammable liquid and vapor.  
 H319 - Causes serious eye irritation.  
 H336 - May cause drowsiness or dizziness.

**GHS Precautionary Phrases:**

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/printing equipment.  
 P242 - Use only non-sparking tools.  
 P243 - Take precautionary measures against static discharge.  
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
 P264 - Wash hands thoroughly after handling.  
 P271 - Use only outdoors or in a well-ventilated area.  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
 P235 - Keep cool.  
 P270 - Do not eat, drink or smoke when using this product.  
 P273 - Avoid release to the environment.

**GHS Response Phrases:**

P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P302+352 - IF ON SKIN: Wash with plenty of soap and water.  
 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.  
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.  
 P337+313 - If eye irritation persists, get medical advice/attention.  
 P332+313 - If skin irritation occurs, get medical advice/attention.  
 P370+378 - In case of fire, use water spray, dry chemical, carbon dioxide, or alcohol

resistant foam to extinguish.

**GHS Storage and Disposal Phrases:**

P403+233 - Store container tightly closed in well-ventilated place.  
 P501 - Dispose of contents/container in accordance with local regulations.

**Emergency Overview:**

**Potential Health Effects (Acute and Chronic):**

Hazards not otherwise classified (HNOC) or not covered by GHS -none. Hazards not otherwise classified (HNOC) or not covered by GHS.

Repeated exposure may cause skin dryness or cracking.

**Inhalation:**

Causes respiratory tract irritation. Vapors may cause dizziness or suffocation.

**Skin Contact:**

May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May be absorbed through the skin in harmful amounts.

**Eye Contact:**

Causes serious eye irritation. Vapors may cause eye irritation.

**Ingestion:**

Harmful if swallowed. May cause irritation of the digestive tract.

### 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
64-17-5	Ethyl alcohol	50.0 -60.0 %
67-64-1	Acetone	20.0 -30.0 %
9004-57-3	Cellulose, Ethyl ether	< 5.0 %
16423-68-0	FD&C Red No. 3	< 5.0 %
57-55-6	Propylene glycol	< 5.0 %

### 4. First Aid Measures

**Emergency and First Aid Procedures:**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**In Case of Inhalation:**

If not breathing, give artificial respiration. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention. If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.

**In Case of Skin Contact:**

Wash with soap and water. Get medical attention if irritation develops or persists. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Flush with copious amounts of water for at least 15 minutes.

**In Case of Eye Contact:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical aid if irritation develops and persists. Get medical aid.

**In Case of Ingestion:**

Wash out mouth with water provided person is conscious. If vomiting occurs naturally, have victim lean forward. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.

**Signs and Symptoms Of Exposure:**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed:**

No data available.

**Note to Physician:**

Treat symptomatically and supportively.

### 5. Fire Fighting Measures

<b>Flash Point:</b>	> -17.00 C (1.4 F) Method Used: TAG Closed Cup
<b>Explosive Limits:</b>	LEL: No data. UEL: No data.
<b>Autoignition Pt:</b>	No data.
<b>Suitable Extinguishing Media:</b>	In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.
<b>Unsuitable Extinguishing Media:</b>	Do NOT use straight streams of water.
<b>Fire Fighting Instructions:</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Extremely flammable liquid and vapor. Vapor may cause flash fire. Vapor may travel considerable distance to source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.
<b>Flammable Properties and Hazards:</b>	No data available.
<b>Hazardous Combustion Products:</b>	Carbon oxides, Nitrogen oxides.

### 6. Accidental Release Measures

<b>Protective Precautions, Protective Equipment and Emergency Procedures:</b>	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.
<b>Environmental Precautions:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	Stop leak if you can do it without risk. Evacuate personnel to safe areas. 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). Remove all sources of ignition.

### 7. Handling and Storage

<b>Precautions To Be Taken in Handling:</b>	Use spark-proof tools and explosion proof equipment. Avoid contact with skin and eyes. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2. Wash thoroughly after handling. Avoid inhalation of vapor or mist.
<b>Precautions To Be Taken in Storing:</b>	Keep container tightly closed in a cool, dry, and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store away from heat and direct sunlight. Store away from sparks, flames. Store away from incompatible material.
<b>Other Precautions:</b>	Apart from the uses mentioned in section 1 no other specific uses are stipulated.

### 8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
64-17-5	Ethyl alcohol	PEL: 1000 ppm	TLV: 1000 ppm STEL: 1000 ppm	No data.
67-64-1	Acetone	PEL: 1000 ppm	TLV: 250 ppm STEL: 500 ppm	No data.
9004-57-3	Cellulose, Ethyl ether	No data.	No data.	No data.
16423-68-0	FD&C Red No. 3	No data.	No data.	No data.
57-55-6	Propylene glycol	No data.	No data.	No data.

**Personal Protective Equipment Symbols:**

**Respiratory Equipment (Specify Type):**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Eye Protection:**

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses with side-shields conforming to EN166.

**Protective Gloves:**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact.

Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Other Protective Clothing:**

Wear appropriate protective clothing to prevent skin exposure. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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

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. Ventilation fans and other electrical service must be non-sparking and have an explosion-proof design.

**Work/Hygienic/Maintenance Practices:**

Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

**Environmental Exposure Controls:**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas [ X ] Liquid [ ] Solid
<b>Appearance and Odor:</b>	Reddish. alcohol-like. Odor Threshold: Nor Determined
<b>pH:</b>	No data.
<b>Melting Point:</b>	-114.10 C (-173.4 F) - -88.88 C (-128.0 F)
<b>Boiling Point:</b>	38.00 C (100.4 F) - -100.00 C (-148.0 F)
<b>Flash Point:</b>	> -17.00 C (1.4 F) TAG Closed Cup
<b>Evaporation Rate:</b>	1.9
<b>Flammability (solid, gas):</b>	No data available.
<b>Explosive Limits:</b>	LEL: No data. UEL: No data.
<b>Vapor Pressure:</b>	No data.
<b>Vapor Density (vs. Air=1):</b>	No data.

**Specific Gravity (Water=1):** No data.  
**Solubility in Water:** No data.  
**Saturated Vapor Concentration:** No data.  
**Octanol/Water Partition Coefficient:** No data.  
**Autoignition Pt:** No data.  
**Decomposition Temperature:** No data.  
**Viscosity:** No data.

**Explosive Properties:** No data available.  
**Information on other hazards:** No data available.

### 10. Stability and Reactivity

**Reactivity:** No data available.  
**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability:** Heat, flames and sparks. Exposure to moisture. Ignition sources.  
**Incompatibility - Materials To Avoid:** Bases, Oxidizing agents, Reducing agents, Acetone reacts violently with phosphorous oxychloride.  
**Hazardous Decomposition or Byproducts:** In the event of fire: see section 5.  
**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid - Hazardous Reactions:** Vapors may form explosive mixture with air.

### 11. Toxicological Information

**Toxicological Information:** Acute toxicity.  
 No data available. Inhalation: Dermal. Germ cell mutagenicity: Reproductive toxicity. Aspiration hazard: Behavioral: Tremor. Behavioral: Headache. Ingestion may cause gastrointestinal irritation. Nausea, Vomiting, Diarrhea.

CAS# 64-17-5:  
 1. Acute toxicity, TDLo, Oral, Human, 3371. UL/KG.  
 Result:  
 Behavioral: Altered sleep time (including change in righting reflex).  
 Behavioral: Excitement.  
 Behavioral: Coma.  
 - Veterinary and Human Toxicology., American College of Veterinary and Comparative Toxicology, Publication Office, Comparative Toxicology, Manhattan, KS 66506, Vol/p/yr: 21,272, 1979

2. Acute toxicity, TDLo, Oral, Human, 700.0 MG/KG.

**Result:**

Behavioral: Changes in psychophysiological tests.

- Neurobehavioral Toxicology and Teratology., For publisher information, see NETEEC, Fayetteville, NY, Vol/p/yr: 8,77, 1986

**CAS# 67-64-1:**

1. Acute toxicity, TDLo, Oral, Human, 2857. MG/KG.

**Result:**

Behavioral: Coma.

Kidney, Ureter, Bladder:Other changes.

- "Toxicology of Drugs and Chemicals", Deichmann, W.B., Academic Press, Inc., New York, Vol/p/yr: -,64, 1969

2. Standard Draize Test, Eyes, Human, 500.0 PPM.

**Result:**

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.

Gastrointestinal:Tumors.

Liver: Tumors.

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

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

**Result:**

Gastrointestinal:Gastritis.

Liver: Hepatitis (hepatocellular necrosis), diffuse.

Kidney, Ureter, Bladder:Interstitial nephritis.

- Prehled Prumyslove Toxikologie, Marhold, J., Organické Latky, Prague Czechoslovakia, Vol/p/yr: -,280, 1986

4. Standard Draize Test, Eyes, Human, 186300. ppm, Mild.

**Result:**

Gastrointestinal: Alteration in gastric secretion.

Gastrointestinal:Other changes.

- CRC Critical Reviews in Toxicology., CRC Press, Inc., 2000 Corporate Blvd., NW, Boca Raton, FL 33421, Vol/p/yr: 32,43, 2002

**Irritation or Corrosion:**

Skin corrosion/irritation. No data available. Skin. Rabbit.

Result: Mild skin irritation -24 h.

Eyes.

**Sensitization:**

No data available. Species: Guinea pig.

Result: Does not cause skin sensitisation.

**Chronic Toxicological Effects:**

Specific target organ toxicity -single exposure (Globally Harmonized System) No data available.

Specific target organ toxicity -repeated exposure: no data available. Specific target organ toxicity - single exposure: May cause drowsiness or dizziness.

**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.

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. This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

<b>CAS #</b>	<b>Hazardous Components (Chemical Name)</b>	<b>NTP</b>	<b>IARC</b>	<b>ACGIH</b>	<b>OSHA</b>
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Revision: 11/27/2024  
 Supersedes Revision: 02/28/2023

64-17-5	Ethyl alcohol	n.a.	1	A4	n.a.
67-64-1	Acetone	n.a.	n.a.	A4	n.a.
9004-57-3	Cellulose, Ethyl ether	n.a.	n.a.	n.a.	n.a.
16423-68-0	FD&C Red No. 3	n.a.	n.a.	n.a.	n.a.
57-55-6	Propylene glycol	n.a.	n.a.	n.a.	n.a.

### 12. Ecological Information

<b>General Ecological Information:</b>	No data available. Toxicity to algae: Remarks: no data available.
<b>Results of PBT and vPvB assessment:</b>	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
<b>Persistence and Degradability:</b>	No data available. Biodegradability: Result: 91 % Readily biodegradable. (OECD Test Guideline 301B)
<b>Bioaccumulative Potential:</b>	No data available. Does not bioaccumulate.
<b>Mobility in Soil:</b>	No data available.
<b>Other adverse effects:</b>	No data available.

### 13. Disposal Considerations

<b>Waste Disposal Method:</b>	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: Dispose of as unused product. Dispose of contents/container in accordance with local/regional/national and international regulations.
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### 14. Transport Information

#### LAND TRANSPORT (US DOT):

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



#### LAND TRANSPORT (Canadian TDG):

<b>TDG Shipping Name:</b>	Printing ink.		
<b>UN Number:</b>	UN1210	<b>Packing Group:</b>	II
<b>Hazard Class:</b>	3 - FLAMMABLE LIQUID	<b>TDG Classification:</b>	

#### LAND TRANSPORT (European ADR/RID):

<b>ADR/RID Shipping Name:</b>	Printing ink.		
<b>UN Number:</b>	UN1210	<b>Packing Group:</b>	II
<b>Hazard Class:</b>	3 - FLAMMABLE LIQUID		

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

**IMDG/IMO Shipping Name:** Printing ink.  
**UN Number:** UN1210 **Packing Group:** II  
**Hazard Class:** 3 - FLAMMABLE LIQUID

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

**ICAO/IATA Shipping Name:** Printing ink.  
**UN Number:** UN1210 **Packing Group:** II  
**Hazard Class:** 3 - FLAMMABLE LIQUID

### 15. Regulatory Information

**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
64-17-5	Ethyl alcohol	No	No	No
67-64-1	Acetone	No	Yes NA	No
9004-57-3	Cellulose, Ethyl ether	No	No	No
16423-68-0	FD&C Red No. 3	No	No	No
57-55-6	Propylene glycol	No	No	No

**This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:**

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Explosive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Acute toxicity (any route of exposure)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Flammable (gases, aerosols, liquid, or solid)	<input type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Health) Hazard Not Otherwise Classified (HNOC)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Combustible Dust		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Physical) Hazard Not Otherwise Classified (HNOC)		

<b>CAS #</b>	<b>Hazardous Components (Chemical Name)</b>	<b>Other US EPA or State Lists</b>
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64-17-5	Ethyl alcohol	TSCA: Inventory CA TAC, Title 8: Title 8
67-64-1	Acetone	TSCA: Inventory CA TAC, Title 8: Title 8
9004-57-3	Cellulose, Ethyl ether	TSCA: Inventory
16423-68-0	FD&C Red No. 3	TSCA: Inventory
57-55-6	Propylene glycol	TSCA: Inventory

<b>CAS #</b>	<b>Hazardous Components (Chemical Name)</b>	<b>International Regulatory Lists</b>
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64-17-5	Ethyl alcohol	Japan ENCS: 5-153 Israel HSL: Cat. Germany WHCS: 96: WGK 1 Switzerland Giftliste 1: G-1158 REACH: (P), 01-2119457610-43: Full
67-64-1	Acetone	Japan ENCS: 2-542 Germany WHCS: 6: WGK 1 Switzerland Giftliste 1: G-1031 REACH: (P), 01-2119471330-49: Full
9004-57-3	Cellulose, Ethyl ether	Japan ENCS: 8-186 Germany WHCS: 5291: WGK 1 Switzerland Giftliste 1: G-8375

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16423-68-0 FD&amp;C Red No. 3

57-55-6 Propylene glycol

REACH: (P)  
Japan ENCS: 5-1596  
Germany WHCS: 8524: WGK 1  
REACH: (P), 01-2120115909-50: Full  
Japan ENCS: 7-62  
Japan ISHL: 2-(8)-323  
Germany WHCS: 280: WGK 1  
Switzerland Giftliste 1: G-2798  
REACH: (P), 01-2119456809-23: Full

### 16. Other Information

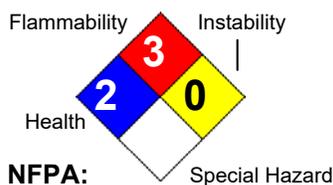
Revision Date: 11/27/2024

Previous revision: 02/28/2023

Hazard Rating System:

HEALTH	2
FLAMMABILITY	3
PHYSICAL	0
PPE	B

HMIS:



NFPA:

**Additional Information About This Product:** To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information presented in this document. Final determination of suitability of any material is the sole responsibility of the user to follow local, state and federal laws and regulations in regards to handling of hazardous materials. Although certain hazards are described herein, unknown hazards may exist and caution should always be exercised.