

SAFETY DATA SHEET



Vero K-Pak Creme Lightener

Section 1. Identification

Product Name	: Vero K-Pak Creme Lightener
Other means of identification	: Not available.
Recommended use	: Hair Care Product
Restrictions on use	: Use only as directed on the product label.
Manufacturer	: Zotos International, INC 100 Tokeneke Road, Darien, CT 06820 www.zotos.com
Validation date	: 3/4/2015.
In case of emergency	: (800) 584-8038 [24 Hours]
Telephone number	: (203) 656-7859 [8:30 a.m. - 5:00 p.m.]
Transportation Emergency	: Contact: CHEMTREC 1-800-424-9300 [US/Canada 24 Hours]
Product type	: Liquid.

Section 2. Hazards identification

Emergency overview

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : OXIDIZING LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 4
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 13.1%

GHS label elements

Hazard pictograms



Signal word : Warning

Precautionary statements

- General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
- Prevention** : Wear protective gloves. Wear eye or face protection. Keep away from heat. - No smoking. Keep away from clothing, incompatible materials and combustible materials. Take any precaution to avoid mixing with combustibles and other incompatible materials. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
- Response** : IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** : Not applicable.

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Section 2. Hazards identification

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

United States

Name	%	CAS number
dipotassium peroxodisulphate	19.02	7727-21-1
diammonium peroxodisulphate	12.37	7727-54-0
Silicic acid, sodium salt	7.83	1344-09-8
disodium metasilicate	7.36	6834-92-0
sodium 2-(dodecyloxy)-2-oxoethane-1-sulphonate	1.60	1847-58-1
silicon dioxide	1.20	7631-86-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Check for and remove any contact lenses. Get medical attention immediately.
- Inhalation** : Move affected person to fresh air. Seek immediate medical attention.
- Skin contact** : Wash contaminated skin with soap and water. If on clothes, remove clothes. Seek medical attention if irritation persists.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. Maintain an open airway.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Specific hazards arising from the chemical

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
metal oxide/oxides

Special protective actions for fire-fighters

- : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Risk of explosion. If large quantities are involved in a major fire, evacuate the area. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fight fire from protected location or maximum possible distance.

Special protective equipment for fire-fighters

- : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out.
- Large spill** : Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep away from clothing, incompatible materials and combustible materials. Keep away from heat.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Separate from reducing agents and combustible materials.

Section 8. Exposure controls/personal protection

United States

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
dipotassium peroxodisulphate	ACGIH TLV (United States, 6/2013). TWA: 0.1 mg/m ³ , (as persulfate) 8 hours.
diammonium peroxodisulphate	ACGIH TLV (United States, 6/2013). TWA: 0.1 mg/m ³ , (as persulfate) 8 hours.
silicon dioxide	NIOSH REL (United States, 10/2013). TWA: 6 mg/m ³ 10 hours.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : None.
- Skin protection**
- Hand protection** : Wear suitable gloves.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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Section 8. Exposure controls/personal protection

- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
Color : White.
Odor : Characteristic.
pH : 9.75
Flash point : Closed cup: Not applicable.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following:
 contact with combustible materials
 Reactions may include the following:
 risk of causing or intensifying fire
- Conditions to avoid** : Drying on clothing or other combustible materials may cause fire.
- Incompatible materials** : Reactive or incompatible with the following materials:
 combustible materials
 reducing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

United States

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
dipotassium peroxodisulphate	LD50 Oral	Rat	802 mg/kg	-
diammonium peroxodisulphate	LD50 Oral	Rat	689 mg/kg	-
Silicic acid, sodium salt	LD50 Oral	Rat	1960 mg/kg	-
disodium metasilicate	LD50 Oral	Rat	1153 mg/kg	-
sodium 2-(dodecyloxy)-2-oxoethane-1-sulphonate	LD50 Oral	Rat	700 mg/kg	-

Irritation/Corrosion

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Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Silicic acid, sodium salt	Eyes - Severe irritant	Rabbit	-	24 hours 10 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 500 milligrams	-
disodium metasilicate	Skin - Moderate irritant	Guinea pig	-	24 hours 250 milligrams	-
	Skin - Severe irritant	Human	-	24 hours 250 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 250 milligrams	-
sodium 2-(dodecyloxy)-2-oxoethane-1-sulphonate	Eyes - Mild irritant	Rabbit	-	35 milligrams	-
	Skin - Moderate irritant	Rabbit	-	0.5 Grams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
silicon dioxide	Eyes - Mild irritant	Rabbit	-	24 hours 25 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
silicon dioxide	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : Causes skin irritation.
- Ingestion** : Harmful if swallowed. Irritating to mouth, throat and stomach.

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Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	1599.2 mg/kg

Section 12. Ecological information

United States

Toxicity

Product/ingredient name	Result	Species	Exposure
dipotassium peroxodisulphate	Acute EC50 2.88 mg/dm ³ Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute LC50 1175000 µg/l	Crustaceans - Cyclops strenuus	48 hours
	Acute LC50 92000 µg/l	Daphnia - Daphnia magna	48 hours
diammonium peroxodisulphate	Acute LC50 170000 µg/l	Crustaceans - Cyclops strenuus	48 hours
	Acute LC50 87000 µg/l	Daphnia - Daphnia pulicaria	48 hours
Silicic acid, sodium salt	Acute EC50 0.4 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 494000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
disodium metasilicate	Acute EC50 33.53 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours

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Section 12. Ecological information

silicon dioxide	Acute LC50 2320 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
	Chronic NOEC 160 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 55.5 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC 4.6 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil


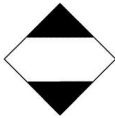

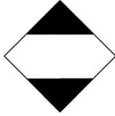

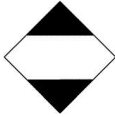
Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations



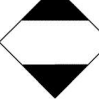


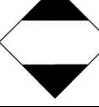


Disposal methods : Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Care should be taken when handling emptied containers that have not been cleaned or rinsed out.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN3139	Oxidizing liquid, n.o.s.	5.1	III	 	<p>Limited quantity Yes.</p> <p>Packaging instruction Passenger aircraft Quantity limitation: 2.5 L</p> <p>Cargo aircraft Quantity limitation: 30 L</p> <p>Special provisions 62, 127, A2, IB2</p>
TDG Classification	UN3139	OXIDIZING LIQUID, N.O.S.	5.1	III	 	<p>Explosive Limit and Limited Quantity Index 5</p> <p>Passenger Carrying Road or Rail Index 2.5</p> <p>Special provisions 16</p>
Mexico Classification	UN3139	LIQUIDO OXIDANTE, N.E.P.	5.1	III	 	<p>Special provisions 223, 274</p>

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Section 14. Transport information

ADR/RID Class	UN3139	OXIDIZING LIQUID, N.O.S.	5.1	III	  	<p>The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.</p> <p>Limited quantity LQ13</p> <p>Special provisions 274</p> <p>Tunnel code (E)</p>
IMDG Class	UN3139	OXIDIZING LIQUID, N.O.S.. Marine pollutant (dipotassium peroxodisulphate, Silicic acid, sodium salt)	5.1	III	  	<p>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</p> <p>Emergency schedules (EmS) F-A, S-Q</p> <p>Special provisions 223, 274</p>
IATA-DGR Class	UN3139	Oxidizing liquid, n.o.s.	5.1	III	 	<p>The environmentally hazardous substance mark may appear if required by other transportation regulations.</p> <p>Passenger and Cargo Aircraft Quantity limitation: 2.5 L Cargo Aircraft Only Quantity limitation: 30 L Packaging instructions: 514 Limited Quantities - Passenger Aircraft Quantity limitation: 1 L Packaging instructions: Y514</p> <p>Special provisions A3</p>

PG* : Packing group

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): Not determined.
Clean Water Act (CWA) 311: edetic acid

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

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Section 15. Regulatory information

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
dipotassium peroxodisulphate	19.02	No.	No.	No.	Yes.	No.
diammonium peroxodisulphate	12.37	No.	No.	No.	Yes.	No.
Silicic acid, sodium salt	7.83	No.	No.	No.	Yes.	No.
disodium metasilicate	7.36	No.	No.	No.	Yes.	No.
sodium 2-(dodecyloxy)-2-oxoethane-1-sulphonate	1.60	No.	No.	No.	Yes.	No.
silicon dioxide	1.20	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	diammonium peroxodisulphate	7727-54-0	12.37
Supplier notification	diammonium peroxodisulphate	7727-54-0	12.37

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: AMORPHOUS SILICA; ETHYLENEDIAMINE TETRAACETIC ACID (EDTA); POTASSIUM PERSULFATE

New York : The following components are listed: Ethylenediamine tetraacetic acid

New Jersey : The following components are listed: MINERAL OIL (UNTREATED and MILDLY TREATED); MINERAL OIL (UNTREATED and MILDLY TREATED); AMMONIUM PERSULFATE; PEROXYDISULFURIC ACID ((HO)S(O)2]2O2), DIAMMONIUM SALT; ETHYLENEDIAMINETETRAACETIC ACID; GLYCINE, N,N'-1,2-ETHANEDIYLBIS[N-(CARBOXYMETHYL)-]; EDTA; POTASSIUM PERSULFATE; PEROXYDISULFURIC ACID, ((HO)S(O)2]2O2), DIPOTASSIUM SALT

Pennsylvania : The following components are listed: SILICA; GLYCINE, N,N'-1,2-ETHANEDIYLBIS[N-(CARBOXYMETHYL)-]; PEROXYDISULFURIC ACID ((HO)S(O)2]2O2), DIPOTASSIUM SALT

California Prop. 65

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product is not known to the State of California to cause cancer.

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Section 15. Regulatory information

Not available.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Canada

WHMIS (Canada) : Class C: Oxidizing material.
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).
Class E: Corrosive material

Canadian lists

Canadian NPRI : The following components are listed: White mineral oil; White mineral oil; Ammonia (total)

CEPA Toxic substances : None of the components are listed.

Canada inventory : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

Classification :



Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	2
Flammability	0
Physical hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

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Section 16. Other information



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of printing	: 3/4/2015.
Date of issue/Date of revision	: 3/4/2015.
Date of previous issue	: No previous validation.
Version	: 0.01
References	: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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 contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.