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Submitting Organization	CONFIDENTIAL		
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Document Title	SUPPORT: LETTER FROM [] TO USEPA RESPONDING TO REQUEST FOR ADDITIONAL INFORMATION W/RE SUBJECT CHEMICAL OF PREVIOUS SUBMISSION, WITH ATTACHMENTS (MSDS) & DATED 9/21/00 (SANITIZED)		
Chemical Category	COMMERCIAL MIXTURE CONTAINING HYDROXYLAMINE NITRATE		

A-03

8EHQ-0900-14729 ^{PR 398666}

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2000 SEP 25 AM 11: 29

COMPANY SANITIZED

September 21, 2000

SANITIZED SUBMITTAL

By FedEx

Document Control Office (7407)
Attention: TSCA § 8(e)
Room G99, East Tower
Office of Pollution Prevention and Toxics
U.S. ENVIRONMENTAL PROTECTION AGENCY
401 M Street, SW
Washington, D.C. 20460-0001

8EHQ-00-14729
89 000 000 317

Re: 8EHQ-0500-14729

Dear Sir or Madam:

[] writes this letter in response to your July 27, 2000 correspondence. By way of background, on May 25, 2000 we submitted under TSCA § 8(e) interim results from a skin sensitization study of a commercial mixture containing hydroxylamine nitrate. The Agency's July 27, 2000 correspondence has requested additional information "on the uses of the tested commercial mixture and other available information to assist EPA in assessing potential exposures, as well as any voluntary risk management actions". We believe the potential exposure to the product, thus the risk of developing an adverse health effect, is low. In an effort to demonstrate our belief and to respond to the Agency's request, this letter will describe the use of the commercial mixture and will discuss risk management actions taken and observed by us and our customers.

Use of commercial mixture

[]. At the point of use, the product is transferred from closed drums to central distribution systems by means of dedicated pumps and piping. The central distribution system delivers the product to multiple [] machines. This enclosed distribution system, substantially minimizes the potential for worker contact with the product. Similar enclosed systems are used to manufacture and package of the product.

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Risk management actions

Product Material Safety Data Sheet and Label

Upon receipt of the interim results from the skin sensitization study of the commercial mixture we promptly revised the product's Material Safety Data Sheet (MSDS) and label. A redacted version of the product's MSDS is enclosed. A summary of the pertinent revisions made to the product's MSDS follows:

- Section III – Hazards Identification: The statement, “may cause skin sensitization” has been added
- Section VIII – Exposure Controls/Personal Protection: The following statements have been added:
 - “Eye-Face Protection: Safety glasses with side shields or goggles recommended to prevent eye contact”
 - “Skin Protection: Impervious gloves”
 - “Protective Clothing: Wear impervious, non-absorbent clothing to prevent contact with skin. Remove contaminated clothing”
- Section XI – Toxicological Information: The interim results of the skin sensitization study have been added under the acute toxicity skin irritation section. The statement of results reads as follows, “Skin Irritation: Product is a weak sensitizer in a dermal sensitization study in guinea pigs (Modified Buehler Method)”. In addition, the statement “potential skin sensitizer” has been added to this section of the MSDS
- Section XV – Regulatory Information: The appropriate European Union (EU) risk phase, “R43: May cause sensitization by skin contact” has been added to the MSDS

Similar changes have been made to the product's label. The statement, “may cause sensitization by skin contact”, as well as the appropriate EU risk symbol (Xi) appear on the label.

Safe Handling Practices - Our Employees

Upon receipt of the interim results from the skin sensitization study of the commercial mixture, we promptly conducted a special training session for our employees who may have potential exposure to the product during the manufacture and distribution processes. Our employees have been informed of the changes to the product's handling and personal protection equipment (PPE) requirements. In addition, the revised product's MSDS and label have been reviewed with employees. Employees wear complete skin, eye and face protection when handling either the raw materials or the final product. To date, there have been no allegations of adverse health effects by employees handling this product.

Safe Handling Practices - Our Customers

We have been diligent in our efforts to inform all of our customers of the new health information regarding this product. Upon receipt of the interim results from the skin sensitization study of the commercial mixture, we promptly contacted and informed all customers that the product may be a potential skin sensitizer. Our initial communications were followed by the distribution of the revised MSDS to all customers. In addition, product is being shipped to customers with the

revised label indicating the new health information. Finally, we have been working closely with one of the primary customer, through an on-site visit to their facility, to review safe handling and use procedures for the product. We continue to be available to address customer questions.

In summary, the methods by which the product are manufactured and used minimize exposure to workers. In addition, the risk management actions executed to date clearly communicate the potential hazard of the product. For these reasons, we strongly believe the potential exposure to the product, thus the risk of developing an adverse health effect, is low.

Please direct questions about this submission to the undersigned.

Very truly yours,

[]

[]
[]

Enclosure

[]				
HMIS Index: 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe	MATERIAL SAFETY DATA SHEET [] (SANITIZED VERSION)			HMIS Rating: 2 - Health 0 - Flammability 0 - Reactivity D- PPE
MSDS has been prepared in accordance with ANSI standard Z400.1-1993, EC Directive 91/155/EEC and 93/112/EEC.				
SECTION I - Chemical Product and Company Identification*				
Trade Name []	Product Type Silicon Dioxide Aqueous Dispersion	Date Revised: June 13, 2000 Date Issued: May 16, 2000	Prepared By: [] Title: Product Steward Engineer	
Manufacturer/Supplier []				
Telephone No. []	Facsimile No. []	Emergency Telephone No. Chemtrec (U.S.) 800-424-9300 Chemtrec (Intl.) 703-527-3887 []		
SECTION II - Composition/Information on Ingredients*				
Substance Trivial Name []		Formal Name Aqueous Dispersion		Chemical Family Not Applicable
Component	CAS No.	EINECS #	% by Weight	EU Classification
Silica, Amorphous, Crystalline Free	7631-86-9	231-595-7	15 - 25	Not classified
De-Ionized Water	7732-18-5	231-791-2	74 - 84	Not classified
Proprietary Additives	Proprietary	Proprietary	<1	Not classified R34, R43
Trade Names and Synonyms []				
Material Uses []				

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SECTION III - Hazards Identification***Emergency Overview:**

Milky white slurry.

Warning: May cause skin sensitization. Avoid contact with skin and eyes. Do not breath dust. Do not breathe mists or aerosols. After contact with skin, wash with plenty of water. Wear suitable protective clothing.

Potential Health Effects**Routes of Exposure:** Eye, Skin**Eye:** May cause slight irritation.**Skin:** May cause skin sensitization. May cause slight irritation.**Ingestion:** No adverse effects expected.

Inhalation: Due to this material's liquid dispersion state, it is not expected to be a significant inhalation hazard. Dried product may cause irritation to the respiratory tract.

Chronic Effects: No material listed as a carcinogen by IARC, NTP, Z List or OSHA.**Teratology:** None identified**Reproduction Info.:** None identified**Target Organs:** None identified

Medical Conditions Aggravated: Individuals with preexisting skin conditions such as dermatitis may be more susceptible to the effects of this material.

Potential Environmental Effects: None Expected.**SECTION IV - First Aid Measures***

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If symptoms develop, seek medical attention. If not breathing, give artificial respiration.

Ingestion: Do not induce vomiting. If conscious and alert, rinse mouth with water. If symptoms develop seek medical attention.

Eyes: Immediately flush lightly with plenty of water for at least 15 minutes. If symptoms develop seek medical attention.

Skin: Flush affected area for 15 minutes with water. Remove contaminated clothing. If symptoms develop seek medical attention.

Advice to Physicians: Treat symptomatically for skin irritation/sensitization or eye irritation, if present.

SECTION V - Fire Fighting Measures

Extinguishing Media Use extinguishing media for surrounding fire.	Unsuitable Media Not Applicable	Flash Point Not Applicable	Flash Point Method Not Applicable
Lower Explosive Limit Not Applicable	Upper Explosive Limit Not Applicable	Ignition in Air Not Defined	
Flammability Clarification Not Applicable		Flame Propagation in Air Not Applicable	
Fire Fighting Procedure Not Applicable		Combustion Hazards Not Applicable	

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Protective Equipment Standard personal protective equipment for structural fire fighting.	Unusual Fire Hazards None expected.	
Sensitivity to Impact Not Applicable		
SECTION VI - Accidental Release Measures*		
Personal Precautions Wear goggles, impervious gloves and forearm protection. Avoid contact with skin, eyes and contaminated clothing. If spilled material dries, creating airborne dust concentrations that exceed the applicable exposure limit, then an approved respirator for dust/fumes is recommended.		
Spill Cleanup Measures Absorb with inert material (e.g., dry sand or earth), then place in chemical waste container. Wear appropriate personal protective equipment. See Section 8.		
Environmental Precautions None		
SECTION VII - Handling and Storage		
Handling & Storage Precautions Handling: Avoid skin and eye contact. Avoid generating aerosols or mists. Do not breath aerosols, mists or dust from dried product. Storage: KEEP FROM FREEZING.		
Hygienic Practices Wash exposed skin frequently. Good practices should be followed in regard to work clothing.		
Special Precautions None		
SECTION VIII - Exposure Controls/Personal Protection*		
Inhalation Standards TLV (U.S.) = 10 mg/m ³ total dust for particles not otherwise classified. PEL (U.S.) = 10 mg/m ³ for nuisance dust. MAK (Germ.) = 4 mg/m ³ inhalable dust. OES (U.K.) = 6 mg/m ³ total inhalable, 2.4 mg/m ³ respirable dust. Australia (TLV) = 10 mg/m ³ total dust containing no asbestos and <1% crystalline silica.		
Eye-Face Protection Safety glasses with side shields or goggles recommended to prevent eye contact	Skin Protection Impervious gloves.	Protective Clothing Wear impervious, non-absorbent clothing to prevent contact with skin. Remove contaminated clothing.
Respiratory Protection None normally needed unless a mist or dust is generated. An approved air-purifying respirator (APR) for particulates may be appropriate to control exposure to dust. Protection provided by air-purifying respirators is		

limited. Use a positive-pressure, air supplied respirator if there is any potential for uncontrolled release, exposure levels are not known, or any circumstances where air-purifying respirators may not provide adequate protection. Use of respirators must include a complete respiratory protection program in accordance with national standards and current best practices.

The following agencies/organizations approve respirators and/or criteria for respirator programs:

- U.S.: NIOSH approval under 42 CFR 84 required.
OSHA (29 CFR 1910.134)
ANSI Z88.2-1992
- EU: CR592 Guidelines for the Selection and Use of Respiratory Protection.
Germany: DIN/EN 143 Respiratory Protective Devices for Dusty Materials.
- UK: BS 4275 Recommendations for the Selection, Use and Maintenance of Respiratory Protective Equipment. HSE Guidance Note HS(G)53 Respiratory Protective Equipment.

Engineering Controls

If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below exposure limits.

Other Protective Measures

None.

SECTION IX - Physical and Chemical Properties

Physical State Milky White Slurry	Color Milky White	Odor None
Odor Threshold Not Applicable	pH 3.5 - 4.0	Boiling Point 100°C
Evaporation Rate Same as water	Melting/Freezing Point 0°C	% Volatile by Volume Not Applicable
Solubility in Water Dispersible	Specific Gravity 1.1 @ 25°C	Vapor Density Water
Vapor Pressure Water	Reid Vapor Pressure Not Applicable	Water/Oil Distribution Not Applicable
Viscosity Not Applicable	Pour Point Not Applicable	

SECTION X - Stability and Reactivity

Chemical Stability Stable under normal conditions	Conditions to Avoid Strong oxidizers and strong reducing agents should be tested for compatibility before use. Iron & other metals ions have been reported to lead to the decomposition of one component of this product.	Incompatible Materials Hydrogen fluoride Alkaline Material leading to a pH of 5 or greater.
Reactivity Stable	Hazardous Decomposition Components of this product may decompose to nitrogen oxides, nitrogen and water. Decomposition may lead to gas release.	Hazardous Polymerization None

SECTION XI - Toxicological Information*

Acute Toxicity

Oral (rat): Not tested.
 Dermal (rabbit): Not tested.
 Inhalation (rat): Not tested.
 Skin Irritation: Product is a weak sensitizer in a dermal sensitization study in guinea pigs (Modified Buehler Method)
 Eye Irritation: Similar product results: Minimally irritating, Toxicity Category IV, EPA-FIFRA Guideline No. 81-4.
 No positive effects.
 Carcinogenicity: Not listed as a carcinogen by IARC, NTP, Z List or OSHA.
 Mutagenicity: Not tested.
 Reproductive Toxicity: Not tested.
 Teratogenicity: Not tested.

Chronic Ingestion Effect None expected.	Chronic Eye Effect None expected.	Chronic Skin Effect None expected.
Chronic Inhalation May cause pneumoconiosis following high exposure to dust.	Sensitization to Material Potential skin sensitizer.	Synergistic Materials None expected.

SECTION XII - Ecological Information

Mobility
Unknown

Ecotoxicity Acute Fish Toxicity: Not tested Acute Daphnia Toxicity: Not tested. WGK Water Hazard Class: NWG	Persistence/Degradability The silica component of this material will persist.	Bio-Accumulation This material is not expected to bio-accumulate.
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SECTION XIII -- Disposal Considerations

Legal Classification

Dispose of in accordance with European, federal, state and local regulations. Same considerations should be given to the disposal of empty containers. As sold, not defined as hazardous waste under U.S. RCRA (Resource Conservation and Recovery Act) regulations.

Waste Key No. Not determined

SECTION XIV - Transport Information*

UN Number Not applicable.	UN Proper Shipping Name Non-hazardous/Non-regulated	UN Class Not applicable.
UN Packing Group Not applicable.	GGVS/GGVE/RID/ADR/IMDG-Code/ICAO-TI Information Not determined.	US Rail Regulations Not determined.

SECTION XV - Regulatory Information

National Registries: All components are in compliance with the inventories below:
Canada: CEPA, Canadian Environmental Protection act, 6th Amendment, Domestic Substance List.

Europe: EINECS, European Inventory of Existing Commercial Chemical Substances.

United States: TSCA, Toxic Substance Control Act.

Japan: MITI, Ministry of International Trade and Industry List of Existing Chemical Substances.

Korea: ECL, Existing Chemical List.

Europe (EU): Product Classification- Xi; R43: May cause sensitization by skin contact.

EU Safety Phrases- S24/25: Avoid contact with skin and eyes.

aerosols.	S22:	Do not breathe dust.
	S23:	Do not breathe mists or
wash with plenty of water.	S28:	After contact with skin,
clothing.	S36:	Wear suitable protective

U.S. Clean Air Act, 1990: No components are listed as hazardous air pollutants. No components contain or are manufactured with Class I or Class II ozone depleting chemicals, as defined in the Clean Air Act of 1990.

U.S. Clean Water Act (40 CFR 116): No components are listed.

U.S. SARA Title III - Superfund Amendments and Reauthorization Act (SARA)

Section 302: Does not contain any constituents that are identified as extremely hazardous.

Section 311/312: Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

Section 311/312 - MSDS Requirements Our evaluation has found this material to be hazardous and should be reported under the following EPA hazard categories:

- Immediate Health Hazard
- Delayed (Chronic) Health Hazard
- Fire Hazard
- Sudden Release of Pressure Hazard
- Reactive Hazard

Section 313: Does not contain any of the substances identified under Section 313 as toxic chemicals in excess of the *de minimis* concentrations necessary to be subject to this rule.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, 40 CFR 302): This material is not a hazardous substance under the CERCLA. Notification of spills of this material is not required.

U.S. FDA Regulations

Not listed

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SECTION XVI - Other Information

Reference Sources Used

Sax, Irving N. & Lewis Sr., Richard J. *Dangerous Properties of Industrial Materials*, 7th Edition.

Revision Indicator

This is a revised MSDS. Revised sections of the MSDS will be indicated by an asterisk (*) in front of the section affected.

Disclaimer

The information set forth is based on information which [] believes to be accurate. No warranty, expressed or implied, is intended. The information is provided solely for your information and consideration and [] assumes no legal responsibility for use or reliance thereon.

[]				
HMIS Index: 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe		MATERIAL SAFETY DATA SHEET [] (SANITIZED VERSION)		HMIS Rating: 2 - Health 0 - Flammability 0 - Reactivity D- PPE
MSDS has been prepared in accordance with ANSI standard Z400.1-1993, EC Directive 91/155/EEC and 93/112/EEC.				
SECTION I - Chemical Product and Company Identification*				
Trade Name []	Product Type Silicon Dioxide Aqueous Dispersion	Date Revised: June 13, 2000 Date Issued: May 16, 2000	Prepared By: [] Title: Product Steward Engineer	
Manufacturer/Supplier []				
Telephone No. []	Facsimile No. []	Emergency Telephone No. Chemtrec (U.S.) 800-424-9300 Chemtrec (Intl.) 703-527-3887 []		
SECTION II - Composition/Information on Ingredients*				
Substance Trivial Name []		Formal Name Aqueous Dispersion		Chemical Family Not Applicable
Component	CAS No.	EINECS #	% by Weight	EU Classification
Silica, Amorphous, Crystalline Free	7631-86-9	231-595-7	15 - 25	Not classified
De-Ionized Water	7732-18-5	231-791-2	74 - 84	
Proprietary Additives	Proprietary	Proprietary	<1	Not classified R34, R43
Trade Names and Synonyms []				
Material Uses []				

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SECTION III - Hazards Identification*

Emergency Overview:

Milky white slurry.

Warning: May cause skin sensitization. Avoid contact with skin and eyes. Do not breath dust. Do not breathe mists or aerosols. After contact with skin, wash with plenty of water. Wear suitable protective clothing.

Potential Health Effects

Routes of Exposure: Eye, Skin

Eye: May cause slight irritation.

Skin: May cause skin sensitization. May cause slight irritation.

Ingestion: No adverse effects expected.

Inhalation: Due to this material's liquid dispersion state, it is not expected to be a significant inhalation hazard. Dried product may cause irritation to the respiratory tract.

Chronic Effects: No material listed as a carcinogen by IARC, NTP, Z List or OSHA.

Teratology: None identified

Reproduction Info.: None identified

Target Organs: None identified

Medical Conditions Aggravated: Individuals with preexisting skin conditions such as dermatitis may be more susceptible to the effects of this material.

Potential Environmental Effects: None Expected.

SECTION IV - First Aid Measures*

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If symptoms develop, seek medical attention. If not breathing, give artificial respiration.

Ingestion: Do not induce vomiting. If conscious and alert, rinse mouth with water. If symptoms develop seek medical attention.

Eyes: Immediately flush lightly with plenty of water for at least 15 minutes. If symptoms develop seek medical attention.

Skin: Flush affected area for 15 minutes with water. Remove contaminated clothing. If symptoms develop seek medical attention.

Advice to Physicians: Treat symptomatically for skin irritation/sensitization or eye irritation, if present.

SECTION V - Fire Fighting Measures

Extinguishing Media Use extinguishing media for surrounding fire.	Unsuitable Media Not Applicable	Flash Point Not Applicable	Flash Point Method Not Applicable
Lower Explosive Limit Not Applicable	Upper Explosive Limit Not Applicable	Ignition in Air Not Defined	
Flammability Clarification Not Applicable		Flame Propagation in Air Not Applicable	
Fire Fighting Procedure Not Applicable		Combustion Hazards Not Applicable	

Protective Equipment Standard personal protective equipment for structural fire fighting.	Unusual Fire Hazards None expected.	
Sensitivity to Impact Not Applicable		
SECTION VI - Accidental Release Measures*		
Personal Precautions Wear goggles, impervious gloves and forearm protection. Avoid contact with skin, eyes and contaminated clothing. If spilled material dries, creating airborne dust concentrations that exceed the applicable exposure limit, then an approved respirator for dust/fumes is recommended.		
Spill Cleanup Measures Absorb with inert material (e.g., dry sand or earth), then place in chemical waste container. Wear appropriate personal protective equipment. See Section 8.		
Environmental Precautions None		
SECTION VII - Handling and Storage		
Handling & Storage Precautions Handling: Avoid skin and eye contact. Avoid generating aerosols or mists. Do not breath aerosols, mists or dust from dried product. Storage: KEEP FROM FREEZING.		
Hygienic Practices Wash exposed skin frequently. Good practices should be followed in regard to work clothing.		
Special Precautions None		
SECTION VIII - Exposure Controls/Personal Protection*		
Inhalation Standards TLV (U.S.) = 10 mg/m ³ total dust for particles not otherwise classified. PEL (U.S.) = 10 mg/m ³ for nuisance dust. MAK (Germ.) = 4 mg/m ³ inhalable dust. OES (U.K.) = 6 mg/m ³ total inhalable, 2.4 mg/m ³ respirable dust. Australia (TLV) = 10 mg/m ³ total dust containing no asbestos and <1% crystalline silica.		
Eye-Face Protection Safety glasses with side shields or goggles recommended to prevent eye contact	Skin Protection Impervious gloves.	Protective Clothing Wear impervious, non-absorbent clothing to prevent contact with skin. Remove contaminated clothing.
Respiratory Protection None normally needed unless a mist or dust is generated. An approved air-purifying respirator (APR) for particulates may be appropriate to control exposure to dust. Protection provided by air-purifying respirators is		

limited. Use a positive-pressure, air supplied respirator if there is any potential for uncontrolled release, exposure levels are not known, or any circumstances where air-purifying respirators may not provide adequate protection. Use of respirators must include a complete respiratory protection program in accordance with national standards and current best practices.

The following agencies/organizations approve respirators and/or criteria for respirator programs:

- U.S.: NIOSH approval under 42 CFR 84 required.
OSHA (29 CFR 1910.134)
ANSI Z88.2-1992
- EU: CR592 Guidelines for the Selection and Use of Respiratory Protection.
Germany: DIN/EN 143 Respiratory Protective Devices for Dusty Materials.
- UK: BS 4275 Recommendations for the Selection, Use and Maintenance of Respiratory Protective Equipment. HSE Guidance Note HS(G)53 Respiratory Protective Equipment.

Engineering Controls

If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below exposure limits.

Other Protective Measures

None.

SECTION IX - Physical and Chemical Properties

Physical State Milky White Slurry	Color Milky White	Odor None
Odor Threshold Not Applicable	pH 3.5 - 4.0	Boiling Point 100°C
Evaporation Rate Same as water	Melting/Freezing Point 0°C	% Volatile by Volume Not Applicable
Solubility in Water Dispersible	Specific Gravity 1.1 @ 25°C	Vapor Density Water
Vapor Pressure Water	Reid Vapor Pressure Not Applicable	Water/Oil Distribution Not Applicable
Viscosity Not Applicable	Pour Point Not Applicable	

SECTION X - Stability and Reactivity

Chemical Stability Stable under normal conditions	Conditions to Avoid Strong oxidizers and strong reducing agents should be tested for compatibility before use. Iron & other metals ions have been reported to lead to the decomposition of one component of this product.	Incompatible Materials Hydrogen fluoride Alkaline Material leading to a pH of 5 or greater.
Reactivity Stable	Hazardous Decomposition Components of this product may decompose to nitrogen oxides, nitrogen and water. Decomposition may lead to gas release.	Hazardous Polymerization None

SECTION XI - Toxicological Information***Acute Toxicity**

Oral (rat): Not tested.

Dermal (rabbit): Not tested.

Inhalation (rat): Not tested.

Skin Irritation: Product is a weak sensitizer in a dermal sensitization study in guinea pigs (Modified Buehler Method)

Eye Irritation: Similar product results: Minimally irritating, Toxicity Category IV, EPA-FIFRA Guideline No. 81-4.

No positive effects.

Carcinogenicity: Not listed as a carcinogen by IARC, NTP, Z List or OSHA.

Mutagenicity: Not tested.

Reproductive Toxicity: Not tested.

Teratogenicity: Not tested.

Chronic Ingestion Effect

None expected.

Chronic Eye Effect

None expected.

Chronic Skin Effect

None expected.

Chronic Inhalation

May cause pneumoconiosis following high exposure to dust.

Sensitization to Material
Potential skin sensitizer.**Synergistic Materials**

None expected.

SECTION XII - Ecological Information**Mobility**

Unknown

Ecotoxicity

Acute Fish Toxicity: Not tested

Acute Daphnia Toxicity: Not tested.

WGK Water Hazard Class: NWG

Persistence/Degradability

The silica component of this material will persist.

Bio-Accumulation

This material is not expected to bio-accumulate.

SECTION XIII -- Disposal Considerations**Legal Classification**

Dispose of in accordance with European, federal, state and local regulations. Same considerations should be given to the disposal of empty containers. As sold, not defined as hazardous waste under U.S. RCRA (Resource Conservation and Recovery Act) regulations.

Waste Key No. Not determined

SECTION XIV - Transport Information***UN Number**

Not applicable.

UN Proper Shipping Name

Non-hazardous/Non-regulated

UN Class

Not applicable.

UN Packing Group

Not applicable.

GGVS/GGVE/RID/ADR/IMDG-Code/ICAO-TI Information

Not determined.

US Rail Regulations

Not determined.

SECTION XV - Regulatory Information

National Registries: All components are in compliance with the inventories below:
Canada: CEPA, Canadian Environmental Protection act, 6th Amendment, Domestic Substance List.

Europe: EINECS, European Inventory of Existing Commercial Chemical Substances.

United States: TSCA, Toxic Substance Control Act.

Japan: MITI, Ministry of International Trade and Industry List of Existing Chemical Substances.

Korea: ECL, Existing Chemical List.

Europe (EU): Product Classification- Xi; R43: May cause sensitization by skin contact.

EU Safety Phrases- S24/25: Avoid contact with skin and eyes.

aerosols.
wash with plenty of water.
clothing.

S22:	Do not breathe dust.
S23:	Do not breathe mists or
S28:	After contact with skin,
S36:	Wear suitable protective

U.S. Clean Air Act, 1990: No components are listed as hazardous air pollutants. No components contain or are manufactured with Class I or Class II ozone depleting chemicals, as defined in the Clean Air Act of 1990.

U.S. Clean Water Act (40 CFR 116): No components are listed.

U.S. SARA Title III - Superfund Amendments and Reauthorization Act (SARA)

Section 302: Does not contain any constituents that are identified as extremely hazardous.

Section 311/312: Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

Section 311/312 - MSDS Requirements Our evaluation has found this material to be hazardous and should be reported under the following EPA hazard categories:

- Immediate Health Hazard
- Delayed (Chronic) Health Hazard
- Fire Hazard
- Sudden Release of Pressure Hazard
- Reactive Hazard

Section 313: Does not contain any of the substances identified under Section 313 as toxic chemicals in excess of the *de minimis* concentrations necessary to be subject to this rule.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, 40 CFR 302): This material is not a hazardous substance under the CERCLA. Notification of spills of this material is not required.

U.S. FDA Regulations

Not listed

SECTION XVI - Other Information

Reference Sources Used

Sax, Irving N. & Lewis Sr., Richard J. *Dangerous Properties of Industrial Materials*, 7th Edition.

Revision Indicator

This is a revised MSDS. Revised sections of the MSDS will be indicated by an asterisk (*) in front of the section affected.

Disclaimer

The information set forth is based on information which [] believes to be accurate. No warranty, expressed or implied, is intended. The information is provided solely for your information and consideration and [] assumes no legal responsibility for use or reliance thereon.