

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Trace Name: Suspengel 16, Suspengel 200, Suspengel 325

Synonyms: None

Chemical Family: Mineral

Application: Additive

Manufacturer/Supplier: CIMBAR Performance Minerals (Supplier)
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2. HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of §1910.1200

Carcinogenicity	Category 1A- H350
Specific Target Organ Toxicity- (Repeated Exposure)	Category 1- H372

Label Elements:

Hazard Pictograms



Signal Word: Danger

Hazard Statements: H350 - May cause cancer by inhalation. H372 - Causes damage to organs through prolonged or repeated exposure if inhaled

Precautionary Statements:

Prevention: P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response: P308 + P313 - If exposed or concerned: Get medical advice/attention P314 - Get medical attention/advice if you feel unwell

Storage: P405 - Store locked up

Disposal: P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

Contains Substances:	CAS Number:
Bentonite	1302-78-9
Crystalline silica, quartz	14808-60-7
Crystalline silica, cristobalite	14464-46-1
Crystalline Silica, tridymite	15468-32-3

Hazards not otherwise classified: None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	Percent (wt%)	GHS Classification
Bentonite	1302-78-9	60 • 100%	Not classified
Crystalline silica, quartz	14808-60-7	1-5%	Carc. 1A (H350) STOT RE 1 (H372)
Crystalline silica, cristobalite	14464-46-1	0.1-1%	Carc. 1A (H350) STOT RE 1 (H372)
Crystalline silica, tridymite	15468-32-3	0.1-1%	Carc. 1A (H350) STOT RE 1 (H372)

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. FIRST AID MEASURES

Description of first aid measures:

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Skin: Wash with soap and water. Get medical attention if irritation persists.

Ingestion: Under normal conditions, first aid procedures are not required.

Most important symptoms/effects, acute and delayed: Breathing crystalline silica can cause lung disease, including silicosis and lung cancer. Crystalline silica has also been associated with scleroderma and kidney disease.

Indication of any immediate medical attention and special treatment needed- Notes to Physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable Extinguishing Media: All standard fire-fighting media

Extinguishing media which must not be used for safety reasons: None known.

Specific hazards arising from the substance or mixture

Special Exposure Hazards Not applicable.

Special protective equipment and precautions for fire-fighters

Special Protective Equipment for Fire-Fighters: Not applicable.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use appropriate protective equipment. Avoid creating and breathing dust. See Section 8 for additional information

Environmental precautions None known.

Methods and material for containment and cleaning up: Collect using dustless method and hold for appropriate disposal.

Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage and disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Handling Precautions: This product contains quartz, cristobalite, and/or tridymite which may become airborne without a

visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH certified, European Standard En 149, or equivalent respirator when using this product. Material is slippery when wet.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities- Storage Information: Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Bentonite	1302-78-9	Not applicable	TWA: 1 mg/m ³
Crystalline silica, quartz	14808-60-7	$\frac{10 \text{ mg/m}^3}{\text{SiO}_2 + 2}$	TWA: 0.025 mg/m ³
Crystalline silica, cristobalite	14464-46-1	$\frac{1/2 \times 10 \text{ mg/m}^3}{\% \text{SiO}_2 + 2}$	

Appropriate engineering controls: Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits.

Personal Protective Equipment: If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection: Not normally needed. But if significant exposures are possible then the following respirator is recommended: Dust/mist respirator. (N95, P2/P3)

Hand Protection Skin Protection: Normal work gloves

Eye Protection Other Precautions: None Known.

Skin Protection/Other Precautions: Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.

Eye Protection: Wear safety glasses or goggles to protect against exposure.

Other Precautions: None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Color: Various
Odor: Odorless Color: Various

<u>Property:</u>	<u>Values:</u>
pH	8-10
Freezing Point/Range	No information available.
Melting Point/Range	No data available
Boiling Point/Range	No data available
Flash Point	No data available
Flammability (solid, gas)	No data available
upper flammability	No data available
limit lower flammability limit	No data available
Evaporation rate	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	2.65
Water Solubility	Insoluble in water
Solubility in other solvents	No data available

Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available
VOC Content	No data available

10. STABILITY AND REACTIVITY

Reactivity: Not expected to be reactive.

Chemical Stability: Stable

Possibility of Hazardous Reactions: Will Not Occur

Conditions to Avoid: None anticipated

Incompatible Materials: Hydrofluoric acid.

Hazardous Decomposition Products: Amorphous silica may transform at elevated temperatures to tridymite (870 C) or cristobalite (1470 C).

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure: Eye or skin contact, inhalation

Acute Toxicity-Inhalation:

Inhaled crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC, Group 1). There is sufficient evidence in experimental animals for the carcinogenicity of tridymite (IARC, Group 2A).

Breathing silica dust may cause irritation of the nose, throat, and respiratory passages. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may also have serious chronic health effects (See "Chronic Effects/Carcinogenicity" subsection below).

Eye Contact: May cause mechanical irritation to eye.

Skin Contact: May cause mechanical skin irritation.

Ingestion: None known.

Chronic Effects/Carcinogenicity Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis.

Cancer Status: The International Agency for Research on Cancer (IARC) has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources can cause lung cancer in humans (Group 1 - carcinogenic to humans) and has determined that there is sufficient evidence in experimental animals for the carcinogenicity of tridymite (Group 2A - possible carcinogen to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997) in conjunction with the use of these minerals. The National Toxicology Program classifies respirable crystalline silica as "Known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as scleroderma (an immune system disorder manifested by scarring of the lungs, skin, and other internal organs) and kidney disease.

Toxicity data:

Toxicolon" data for the components

Substances	CAS Number	LOSO Oral	LOSO Dermal	LC50 Inhalation
Bentonite	1302-78-9	> 5000 mg/kg (Rat) > 2000 mn/kg (Rat)	No data available	> 5.27 mg/L (Rat)

Crystalline silica, quartz	14808-60-7	500 mg/kg (Rat) >15,000 mn/kg (Human)	No data available	No data available
Crystalline silica, cristobalite	14464-46-1	500 mg/kg (Rat)	No data available	No data available
Crystalline silica, tridymite	15468-32-3	500 mg/kg (Rat)	No data available	No data available

Substances	CAS	Skin corrosion/irritation
Bentonite	1302-78-9	Non-irritating to the skin (Rabbit)
Crystalline silica, quartz	14808-60-7	Non-irritating to the skin
Crystalline silica, cristobalite	14464-46-1	Non-irritating to the skin
Crystalline silica, tridymite	15468-32-3	Non-irritating to the skin

Substances	CAS Number	Eye irritation
Bentonite	1302-78-9	Nonirritating to the eye (Rabbit)
Crystalline silica, quartz	14808-60-7	Mechanical irritation of the eyes is possible.
Crystalline silica, cristobalite	14464-46-1	Mechanical irritation of the eyes is possible.
Crystalline silica, tridymite	15468-32-3	Mechanical irritation of the eyes is possible.

Substances	CAS	Skin Sensitization
Bentonite	1302-78-9	Did not cause sensitization on laboratory animals (mouse)
Crystalline silica, quartz	14808-60-7	Not regarded as a sensitizer.
Crystalline silica, cristobalite	14464-46-1	Not regarded as a sensitizer.
Crystalline silica, tridymite	15468-32-3	Not regarded as a sensitizer.

Substances	CAS	Respiratory Sensitization
Bentonite	1302-78-9	No information available
Crystalline silica, quartz	14808-60-7	No information available

Crystalline silica, cristobalite	14464-46-1	No information available
Crystalline silica, tridymite	15468-32-3	No information available

Substances	CAS	Mutagenic Effects
Bentonite	1302-78-9	In vitro tests did not show mutagenic effects
Crystalline silica, quartz	14808-60-7	Not regarded as mutagenic.
Crystalline silica, cristobalite	14464-46-1	Not regarded as mutagenic.
Crystalline silica, tridymite	15468-32-3	Not regarded as mutagenic.

Substances	CAS	Carcinogenic Effects
Bentonite	1302-78-9	Did not show carcinogenic effects in animal experiments (similar substances)
Crystalline silica, quartz	14808-60-7	Contains crystalline silica which may cause silicosis, a delayed and progressive lung disease. The IARC and NTP have determined there is sufficient evidence in humans of the carcinogenicity of crystalline silica with repeated respiratory exposure. Based on available scientific evidence, this substance is a threshold carcinogen with a mode of action involving indirect genotoxicity secondary to lung injury.
Crystalline silica, cristobalite	14464-46-1	Contains crystalline silica which may cause silicosis, a delayed and progressive lung disease. The IARC and NTP have determined there is sufficient evidence in humans of the carcinogenicity of crystalline silica with repeated respiratory exposure. Based on available scientific evidence, this substance is a threshold carcinogen with a mode of action involving indirect genotoxicity secondary to lung injury.
Crystalline silica, tridymite	15468-32-3	Contains crystalline silica which may cause silicosis, a delayed and progressive lung disease. The IARC and NTP have determined there is sufficient evidence in humans of the carcinogenicity of crystalline silica with repeated respiratory exposure. Based on available scientific evidence, this substance is a threshold carcinogen with a mode of action involving indirect genotoxicity secondary to lung injury.

Substances	CAS	Reproductive toxicity
Bentonite	1302-78-9	Did not show teratogenic effects in animal experiments.
Crystalline silica, quartz	14808-60-7	No information available
Crystalline silica, cristobalite	14464-46-1	No information available
Crystalline silica, tridymite	15468-32-3	No information available

Substances	CAS	STOT - single exposure
Bentonite	1302-78-9	None under normal use conditions

Crystalline silica, quartz	14808-60-7	No significant toxicity observed in animal studies at concentration requiring classification.
Crystalline silica,	14464-46-1	No significant toxicity observed in animal studies at concentration requiring classification.
Crystalline silica, tridymite	15468-32-3	No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS	STOT - repeated exposure
Bentonite	1302-78-9	None under normal use conditions
Crystalline silica, quartz	14808-60-7	Causes damage to organs through prolonged or repeated exposure if inhaled: (Lungs)
Crystalline silica,	14464-46-1	Causes damage to organs through prolonged or repeated exposure if inhaled: (Lungs)
Crystalline silica, tridymite	15468-32-3	Causes damage to organs through prolonged or repeated exposure if inhaled: (Lungs)

Substances	CAS	Aspiration hazard
Bentonite	1302-78-9	Not applicable
Crystalline silica, quartz	14808-60-7	Not applicable
Crystalline silica, cristobalite	14464-46-1	Not applicable
Crystalline silica, tridymite	15468-32-3	Not applicable

12. ECOLOGICAL INFORMATION

Product Ecotoxicity Data: No data available

SUBSTANCE ECOTOXICITY DATA:

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Bentonite	1302-78-9	EC50(72h): > 100 mg/L (freshwater algae)	TLM96 10,000 ppm (Oncorhynchus mykiss) LC50 (96h) 16,000 - 19,000 mg/L (Oncorhynchus mykiss) LC50 (24h) 2800 - 3200 mg/L (black bass, warmouth bass, blue gill and sunfish)	No information available	EC50 (96h) 81.6 mg/L (Metacarcinus magister) EC50 (96h) 24.8 mg/L (Pandalus danae) EC50 (48h) > 100 mg/L (Daphnia magna)
Crystalline silica, quartz	14808-60-7	No information available	LL50 (96h) 10,000 mg/L (Dania rerio) (similar substance)	No information available	LL50 (24h) > 10,000 mg/L (Daphnia magna) (similar substance)
Crystalline silica, Cristobalite	14464-46-1	No information available	LLO (96h) 10,000 mg/L (Dania rerio) (similar substance)	No information available	LL50 (24h) > 10,000 mg/L (Daphnia magna) (similar substance)
Crystalline silica, tridymite	15468-32-3	No information available	LLO (96h) 10,000 mg/L (Dania rerio) (similar substance)	No information available	LL50 (24h) > 10,000 mg/L (Daphnia magna) (similar substance)

PERSISTENCE AND DEGRADABILITY:

Substances	CAS Number	Persistence and Degradability
Bentonite	1302-78-9	The methods for determining biodegradability are not applicable to inorganic substances.
Crystalline silica, quartz	14808-60-7	The methods for determining biodegradability are not applicable to inorganic substances.
Crystalline silica, cristobalite	14464-46-1	The methods for determining biodegradability are not applicable to inorganic substances.
Crystalline silica, tridymite	15468-32-3	The methods for determining biodegradability are not applicable to inorganic substances.

BIOACCUMULATIVE POTENTIAL:

Substances	CAS Number	Log Pow
Bentonite	1302-78-9	No information available
Crystalline silica, quartz	14808-60-7	No information available
Crystalline silica, cristobalite	14464-46-1	No information available
Crystalline silica, tridymite	15468-32-3	

MOBILITY IN SOIL:	
Substances	Mobility
Crystalline silica, quartz	No information available
Crystalline silica, cristobalite	No information available
Crystalline silica, tridymite	No information available

13. DISPOSAL CONSIDERATIONS

Disposal Method: Bury in a licensed landfill according to federal, state, and local regulations.

Contaminated Packaging: Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

US DOT:

UN Number:	Not restricted
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable
US DOT (Bulk)	Not applicable

Canadian TDG:

UN Number:	Not restricted
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable

IMDG/IMO:

UN Number:	Not restricted
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable

IATA/ICAO:

UN Number:	Not restricted
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

Special Precautions for User: None

15. REGULATORY INFORMATION

US Regulations:

US TSCA Inventory: All components listed on inventory or are exempt.

EPA SARA Title III Extremely Hazardous Substances: Not applicable.

EPA SARA (311,312) Hazard Class: Chronic Health Hazard.

EPA SARA (313) Chemicals: This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity: Not applicable

EPA RCRA Hazardous Waste Classification: If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65: The California Proposition 65 regulations apply to this product. MA Right-to-Know Law One or more components listed.

NJ Right-to-Know Law: One or more components listed.

PA Right-to-Know Law: One or more components listed.

Canadian Regulations:

Canadian DSL Inventory: All components listed on inventory or are exempt.

REACH Status: This product is a naturally occurring mineral substance and is therefore exempt from the registration requirement. (source: EXEMPTIONS FROM THE OBLIGATION TO REGISTER IN ACCORDANCE WITH ARTICLE 2 (7) (b), Annex II, Annex V

16. OTHER INFORMATION

The information contained herein is based on data available to Cimbar Performance Minerals and is believed to be accurate. However, Cimbar Performance Minerals makes no warranty, expressed or implied, regarding the accuracy or completeness of this information or the results to be obtained from the use thereof.

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