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Rietven 157
5464 PJ Veghel
The Netherlands
tel : +31(0)413-355361
fax: +31(0)413-352428
e-mail: info@benseng.com

website: www.benseng.com
KvK Oost Brabant: 17204780
Bank nr.: 1311.57.531
BIC/SWIFT: RABONL2U
IBAN: NL92RABO0131157531
BTW nr: NL8178.10.109.B.01

GENERAL SPECIFICATION

Silicium Dioxide Sipernat 22S (E551) powder

SDOnn-w

General Information			
Productcode	SDOnn-w	Quality assurance:	NORMAL
Batch code	VC..		
Best before	...		
Substance	Silicium Dioxide Sipernat 22S (E551) powder		
Species	Silicon dioxide		
Appearance	white fluffy powder		
Flavor / Aroma	characteristic	Taric custom code: 2811 22 00	
Country of production / packaging	Germany		

Analyses	Specification	Results
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Composition specification		
SiO2 content	≥ 95%	
properties	high oil absorption (DBP)	

Physical Property		
Sieve residue 45 micron	≤ 1,5%	
Particle size	11,5 - 15,5 µm	
Loss on drying (2h x 105°C)	≤ 7,0%	
pH-value (solution 5%)	5,5 - 7,5	
Solubility	water soluble	

Chemical Property		
Nitrogen surface	170-210 m2/g	
DOA absorption	225-255 ml/100	

Typical nutritional values (per 100 grams)			
Energy (kJ)	?	Total proteins (%)	?
Total carbohydrates (%)	?	Sugar (%)	?
Fat (%)	?	Dietary fibers (%)	?
Saturated Fat (%)	?	Sodium (%)	?

Directions for use	As foodsupplement ingredient advised maximum dosage for adults: 2,5 grams/day
Statement	Allergens not likely, but not specified. Heavy metals only controlled by random re-testing. Production site is ISO 9001 and ISO 14001 certified. Supplier is GMP certified.
Storage	Store in a cool dry place, avoiding sunlight directly.
Shelf Life	At least 3 years when stored properly.
Standard packaging	Food grade multiplayer polyethylene bags, 25kg in cardboard drum

cfu= colony forming units

ppm= parts per million

n.d. = not detectable

As stated by our supplier

The manufacturer/supplier of this product or ingredient is carefully selected according HACCP-principles. Nevertheless this data is purely informative and does not absolve you of the need to check the goods for (specific) use yourself. You remain fully and at all times responsible for the product, the purpose for or in which it is used and the possible consequences in which it can result. Under no circumstances Benseng Foodsupplements BV can be held responsible for the application of it's products in violation with existing regulations and/or licenses. Except per contractual agreement, this data sheet is subject to change without prior notice. Benseng Foodsupplements BV's policy is to prevent any genetic modification of it's products or their ingredients. Copyright © 2013 Benseng Foodsupplements BV, Veghel, The Netherlands.



Health	2
Fire	1
Reactivity	0
Personal Protection	E

MATERIAL SAFETY DATA SHEET (MSDS)

Silicium Dioxide Sipernat 22S (E551) powder

Section 1: Chemical Product and Company identification

Product name: Silicium Dioxide Sipernat 22S (E551) powder
EINECS#: 231-545-4
CAS#: 112926-00-8 (ex. 7631-86-9)
Synonyms: Silica hydrate, Precipitated silica
Chemical name: Silicon Dioxide
Chemical formula: Si-O₂

Supplier of MSDS:
Benseng Foodsupplements BV
Rietven 157
5464 PJ Veghel, The Netherlands
Emergency phone:
+31-413-355361

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS#	% by Weight
Silicium Dioxide Sipernat 22S (E551) powder	112926-00-8	100%

Toxicological Data on Ingredients: ORAL (LD50): Acute: >10000 mg/kg [Rat]. DERMAL (LD50): Acute: >5000 mg/kg [Rabbit].

Organism	Test Type	Route	Reported Dose (Normalized Dose)	Effect	Source
rat	LC	inhalation	> 200gm/m ³ /1H (200000mg/m ³)	LUNGS, THORAX, OR RESPIRATION: "FIBROSIS, FOCAL (PNEUMOCONIOSIS)"	National Technical Information Service, Vol. OTS0537735,
rat	LCLo	inhalation	2190mg/m ³ /4H (2190mg/m ³)	LUNGS, THORAX, OR RESPIRATION: DYSPNEA	National Technical Information Service, Vol. OTS0537804,
rat	LDLo	oral	5gm/kg (5000mg/kg)		National Technical Information Service, Vol. OTS0537804,

Section 3: Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), eye contact (irritant), ingestion, inhalation.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to lungs, upper respiratory tract. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Hygroscopic

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 2 (mg/m³) [Australia] Inhalation Respirable. TWA: 6 (mg/m³) [United Kingdom (UK)] Inhalation Respirable. Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Amorphous solid powder.)

Odor: Odorless.

Taste: Tasteless.

Molecular Weight: Not available.

Color: White.

pH (1% soln/water): Not applicable.

Boiling Point: Not available.

Melting Point: 1700°C (3092°F)

Critical Temperature: Not available.

Specific Gravity: 2.1 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: see solubility.

Solubility: water soluble

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, moisture, excess dust generation.

Incompatibility with various substances: Not available.

Corrosivity: Not available.

Special Remarks on Reactivity:

Hygroscopic. Incompatible with (hydrogen) fluoride, oxygen difluoride, chlorine trifluoride. May react vigorously with vinyl acetate vapor.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals:

Acute oral toxicity (LD50): >10000 mg/kg [Rat]. Acute dermal toxicity (LD50): >5000 mg/kg [Rabbit]. See section 2.

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC. May cause damage to the following organs: lungs, upper respiratory tract.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause drying of the skin. Eyes: Dust may cause irritation. Inhalation: May cause respiratory tract irritation and drying of the mucous membranes. May affect lungs and respiration. Ingestion: Low hazard expected for normal industrial handling and use.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:

Pennsylvania RTK: Silicon Dioxide, amorphous; Sodium Sulfate Minnesota: Silicon Dioxide, amorphous Massachusetts RTK: Silicon Dioxide, amorphous; Sodium Sulfate New Jersey: Silicon Dioxide, amorphous California Director's List of Hazardous Substances: Silicon Dioxide, amorphous TSCA 8(b) inventory: Silicon Dioxide, amorphous (Silica)

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):

This product is not classified according to the EU regulations. Not applicable.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

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

Health: 1

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Precautionary statement:

Section 16: GHS Classification and labelling information ECHA

Classification of the substance or mixture:

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

This substance is not classified as dangerous according to Directive 67/548/EEC.

Labelling according Regulation (EC) No 1272/2008 [CLP]: -> self classification:

Hazard Symbol / pictogram:

GHS07

Signal word:

warning

Hazard Statement:

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Precautionary statement:

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes.

P281

Remove contact lenses, if present and easy to do. Continue rinsing.



The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall supplier be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if supplier has been advised of the possibility of such damages.