

SAFETY DATA SHEET

Creation Date 07-Aug-2014

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Revision Number 7

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

1. Identification

Product Name Molecular Sieves, Grade 513 (Type 4A; 4-8 mesh)

Cat No. : M513-5LB

CAS No 1318-02-1
Synonyms No information available

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99
CHEMTREC Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

Carcinogenicity	Category 1A
Specific target organ toxicity - (repeated exposure)	Category 2
Target Organs - Respiratory system.	

Label Elements

Signal Word

Danger

Hazard Statements

May cause cancer
May cause damage to organs through prolonged or repeated exposure

**Precautionary Statements****Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection

Response

IF exposed or concerned: Get medical attention/advice

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Hazards classified under paragraph (d)(1)(ii) of 1910.1200**

No information available

WARNING. Cancer - <https://www.p65warnings.ca.gov/>.

3. Composition/information on Ingredients

Component	CAS No	Weight %
Zeolite	1318-02-1	99-100
Quartz	14808-60-7	<0.1

4. First-aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
Inhalation	Remove to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial respiration.
Ingestion	Do NOT induce vomiting. Get medical attention if symptoms occur.
Most important symptoms and effects	No information available.
Notes to Physician	Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.
Unsuitable Extinguishing Media	No information available

Flash Point Method - Not applicable
No information available

Autoignition Temperature No information available

Explosion Limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Non-combustible. None known.

Hazardous Combustion Products

None known.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health
2

Flammability
0

Instability
0

Physical hazards
N/A

6. Accidental release measures**Personal Precautions**

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes or clothing.

Environmental Precautions

Avoid release to the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

7. Handling and Storage**Handling**

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

Storage.

Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. None known.

8. Exposure controls / personal protection**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH	Mexico OEL (TWA)
Quartz	TWA: 0.025 mg/m ³	(Vacated) TWA: 0.1 mg/m ³ TWA: 50 µg/m ³	IDLH: 50 mg/m ³ REL = 0.05 mg/m ³ (TWA)	TWA: 0.025 mg/m ³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures

None under normal use conditions.

Personal Protective Equipment**Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	No protective equipment is needed under normal use conditions.
Recommended Filter type:	Particle filter.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance			
Physical State	Solid		
Color	Beige		
Odor	Odorless		
Odor Threshold	No information available		
Property	Values	Remarks	• Method
Melting Point/Range	No data available		
Softening Point	No data available		
Boiling Point/Range	Not applicable		
Flash Point	Not applicable		
Flammability (liquid)	Not applicable		
Flammability (solid,gas)	No information available		
Explosion Limits	No data available		
Autoignition Temperature	No data available		
Decomposition Temperature	No data available		
pH	10.5 - 13.3		
Viscosity	Not applicable	Solid	
Water Solubility	Insoluble		
Solubility in other solvents	No information available		
Partition Coefficient (n-octanol/water)			
Vapor Pressure	No data available		
Density / Specific Gravity	2.1		
Bulk Density	No data available		
Vapor Density	Not applicable	Solid	
Particle characteristics	Size distribution 4-8 Mesh		
Other Information			
Evaporation Rate	Not applicable - Solid		

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Avoid dust formation.
Incompatible Materials	None known
Hazardous Decomposition Products	None under normal use conditions
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Information on expected route of exposure

Inhalation	Not an expected route of exposure.
Ingestion	May be harmful if swallowed.
Eyes	Avoid contact with eyes.
Skin	Avoid contact with skin.

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Zeolite	LD50 > 5110 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	LC50 > 3.35 mg/L (Rat) 4 h

Toxicologically Synergistic Products No information available

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;
Respiratory No data available
Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity;

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Zeolite	1318-02-1	Not listed	Not listed	Not listed	Not listed	Not listed
Quartz	14808-60-7	Group 1	Known	A2	X	A2

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; Not applicable
Solid

Symptoms / effects,both acute and delayed No information available.

Other Adverse Effects The toxicological properties have not been fully investigated.

Endocrine Disrupting Properties This product does not contain any known or suspected endocrine disruptors.

12. Ecological information

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Zeolite	EC50: = 18 mg/L, 96h (Desmodesmus subspicatus)	LC50: = 1800 mg/L, 96h semi-static (Brachydanio rerio) LC50: 3200 - 5600 mg/L, 96h semi-static (Oryzias latipes) LC50: 1800 - 3200 mg/L, 96h semi-static (Poecilia reticulata)	EC50 3200 - 5600 mg/L 8 h EC50 = 1550 mg/L 16 h	EC50: 1000 - 1800 mg/L, 48h (Daphnia magna)

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. Regulatory Information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Zeolite	1318-02-1	-	-	-
Quartz	14808-60-7	X	ACTIVE	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT) Not applicable

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Zeolite	1318-02-1	X	-	215-283-8	X	-		X	X	KE-35511
Quartz	14808-60-7	X	-	238-878-4	X	X	X	X	X	KE-29983

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Quartz	50 µg/m ³ TWA 25 µg/m ³ Action Level	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65 This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Quartz	14808-60-7	Carcinogen	-	Carcinogen

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Quartz	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)

Zeolite	1318-02-1	-	-	-
Quartz	14808-60-7	-	-	-

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Zeolite	1318-02-1	Listed	Not applicable	Not applicable	Not applicable
Quartz	14808-60-7	Listed	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Zeolite	1318-02-1	Not applicable	Not applicable	Not applicable	Not applicable
Quartz	14808-60-7	Not applicable	Not applicable	Not applicable	Not applicable

16. Other Information

Prepared By	Product stewardship (Regulatory Affairs) Thermo Fisher Scientific email - begel.sdsdesk@thermofisher.com
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Revision Summary	Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS