

SAFETY DATA SHEET

Revision Date 12/22/2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name : Molecular Sieve

Product Number : 1052, 226-182 Brand : SKC, Inc.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Air Sampling

Details of the supplier of the safety data sheet

Company : SKC, Inc.

863 Valley View Rd. Eighty Four, PA 15330

USA

Telephone : 724-941-9701; 800-752-8472 (Mon - Fri, 8:30 a.m. - 5:00 p.m. EST)

Fax : 724-941-1369 (Mon - Fri, 8:30 a.m. - 5:00 p.m. EST)

Emergency telephone number

Emergency Phone # : CHEMTREC at 800-424-9300 (U.S./Canada); 703-741-5970 (Global)

2. HAZARDS IDENTIFICATION

Emergency Overview

Form : Beads or pellets
Color : white to tan
Odor : none

Classification of the substance or mixture

Classification of

the substance or mixture : Carcinogenicity, Category 1A, Inhalation

GHS Label elements, including precautionary statements

Symbol(s) :

Signal word : Danger

Hazard statements : May cause cancer by inhalation.

Precautionary statements : **Prevention:** Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

Response:

IF exposed or concerned: Get medical advice/ attention.

Storage: Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Publication 1991 Rev 231222 Page 1 of 7

Hazards not

otherwise classified : The product gets hot as it first adsorbs water.

Carcinogenicity

NTP: Quartz (SiO₂) 14808-60-7

Known carcinogen

IARC: Quartz (SiO₂) 14808-60-7

Group 1: Carcinogenic to humans

ACGIH: Quartz (SiO₂) 14808-60-7

A2: Suspected human carcinogen

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Chemical Name	CAS-No.	Concentration
Zeolite, cuboidal, crystalline, synthetic, non-fibrous	1318-02-1	>70.00 %
Mineral binder	_	<30.00 %
Quartz (SiO ₂)	14808-60-7	<5.00 %

Note: Composition as shown represents the chemical composition of the product and is not representing the composition for inventory purposes. See Section 15 for inventory information.

4. FIRST AID MEASURES

Inhalation : Remove to fresh air. If symptoms persist, call a physician.

Skin contact : Wash off with soap and plenty of water. If skin irritation persists, call a physician.

Eye contact : Rinse immediately with plenty of water for at least 15 minutes. If eye irritation persists,

consult a physician.

Ingestion : Drink at least 2 glasses of water. Obtain medical attention.

Never give anything by mouth to an unconscious person.

Notes to physician

Treatment : This product is a desiccant and generates heat as it adsorbs water. The used product can

contain material of a hazardous nature. Identify that material and treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Not combustible.

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Specific hazards

during firefighting : The product itself does not burn.

The used product can retain material of a hazardous nature.

Identify that material and inform the fire fighters.

Special protective equipment

for firefighters

: In the case of respirable dust and/or fumes, use self-contained breathing apparatus and

dust impervious protective suit.

Publication 1991 Rev 231222 Page 2 of 7

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : For personal protection see section 8.

Environmental precautions : No special environmental precautions required.

Methods for cleaning up : Sweep, shovel or vacuum spilled product into appropriate containers (do not use a vacuum

if material has contacted a hydrocarbon material). Pick up and arrange disposal without creating dust. Never return spills in original containers for re-use.

Spilled product should be disposed of in accordance with all applicable government

regulations.

7. HANDLING AND STORAGE

Handling

Handling : Handle and open container with care.

Avoid dust formation.

Avoid contact with skin and eyes.

Provide an electrical ground connection during loading and transfer operations to avoid static discharge in an explosive atmosphere and to prevent persons handling the product

from receiving static shocks.

Storage

Requirements for storage

areas and containers : Store in original container.

Keep in a dry place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Handle in accordance with good industrial hygiene and safety practice.

Engineering measures : Ensure adequate ventilation, especially in confined areas.

Eye protection : Safety glasses

Safety goggles

Hand protection : Protective gloves

Skin and body protection : Work uniform and gloves to prevent prolonged contact.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Breathing apparatus with filter: NIOSH classification N-100 or if oil/liquid aerosols are

present P-100 (42 CFR 84).

Exposure Guidelines

Components	CAS-No.	Value	Control parameters	Update	Basis
Zeolite, cuboidal, crystalline, synthetic, non-fibrous	1318-02-1	TWA : Time weighted average	1 mg/m ³	2008	ACGIH:US. ACGIH Threshold Limit Values
Further information:		Form of exposure : Respirable fraction.			

Quartz (SiO ₂)	14808-60-7	TWA : Time weighted average	0.025 mg/m ³	2008	ACGIH:US. ACGIH Threshold Limit Values
Further information:		Form of exposure : R	espirable fraction.		

Publication 1991 Rev 231222 Page 3 of 7

		Т.			
Quartz (SiO₂)	14808-60-7	REL: Recommended exposure limit (REL):	0.05 mg/m ³	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards
Further information:		Form of exposure : Respirable dust.			
		T		T	
Quartz (SiO ₂)	14808-60-7	TWA: Time weighted average	0.1 mg/m ³	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000)
Further information:		Form of exposure : Respirable dust.			
		T		1	
Quartz (SiO₂)	14808-60-7	TWA : Time weighted average	2.4 millions of particles per cubic foot of air The exposure limit is calculated from the equation, 250/ (%SiO ₂ +5), using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits.	2000	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000)
Further information:		Form of exposure :			
					·
Quartz (SiO₂)	14808-60-7	TWA : Time weighted average	0.1 mg/m³ The exposure limit is calculated from the equation, 10/(%SiO ₂ +2), using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits.	2000	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000)
Further information:		Form of exposure : Respirable.			
Quartz (SiO ₂)	14808-60-7	TWA : Time weighted average	0.3 mg/m ³ The exposure limit is calculated from the equation, 30/(%SiO ₂ +2), using a value of 100% SiO ₂ . Lower values of % SiO ₂ will give higher exposure limits.	2000	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000)
Further information:		Form of exposure : Total dust.			

Publication 1991 Rev 231222 Page 4 of 7

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Beads or pellets

Color : white to tan

Odor : none

pH : Note: Not applicable

Melting point/range : > 400 °C

Boiling point/boiling range : Note: Not applicable

Flash point : Note: Not applicable

Density : $> 2.0 \text{ g/cm}^3$

Specific gravity : > 1.0

Water solubility : Note: insoluble

Solubility in other solvents : Note: insoluble

Bulk density : Note: For further information, refer to the product technical data sheet.

10. STABILITY AND REACTIVITY

Chemical stability : Stable

Incompatible materials to avoid: Sudden contact with high concentrations of chemicals having high heats of adsorption such

as olefins, HCI, etc.

When first wetted, the product can heat up to the boiling point of water. Flood with water to

cool material.

Hazardous decomposition

products : No decomposition if used as directed.

Hydrocarbons and other materials that contact the product during normal use can be

retained on the product.

It is reasonable to expect that decomposition products will come from these retained

materials of use.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 Oral: > 32,000 mg/kg

Species: Rat

Acute inhalation toxicity : Note: no data available

Acute dermal toxicity : LD50 Dermal: > 2,000 mg/kg

Species: Rabbit

Skin irritation : Species: Rabbit

Classification: Not classified as a skin irritant in animal testing.

Eye irritation : Species: Rabbit

Result: mild transient effects

Further information : Note: The toxicological data has been taken from products of similar composition.

Publication 1991 Rev 231222 Page 5 of 7

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish : Note: no data available

Toxicity to daphnia and other

aquatic invertebrates : Note: no data available

Toxicity to algae : Note: no data available

Elimination information (persistence and degradability)

Bioaccumulation : Note: no data available

Mobility : Note: no data available

Biodegradability : Note: no data available

Further information on ecology

Additional ecological

information : No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal methods : This product (in its fresh unused state) is not listed by generic name or trademark name

in the U.S. EPA's RCRA regulations and does not possess any of the four identifying characteristics of hazardous waste (ignitability, corrosivity, reactivity or toxicity).

Materials of a hazardous nature that contact the product during normal use may be retained

on this product. The user of the product must identify the hazards associated with the

retained material in order to assess the waste disposal options.

14. TRANSPORT INFORMATION

DOT Not dangerous goods

TDG Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods

15. REGULATORY INFORMATION

Inventories

US. Toxic Substances

Control Act : On the inventory, or in compliance with the inventory

Australia. Industrial Chemical (Notification and

Assessment) Act : On the inventory, or in compliance with the inventory

Canada. Canadian

Environmental Protection Act

(CEPA). Domestic

Substances List (DSL) : All components of this product are on the Canadian DSL.

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Toxic Chemical

Control Law (TCCL) List : On the inventory, or in compliance with the inventory

Publication 1991 Rev 231222 Page 6 of 7

Philippines. The Toxic Substances and Hazardous

and Nuclear Waste Control Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing

Chemical Substances : On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New

Zealand : On the inventory, or in compliance with the inventory

Note : Zeolites are considered Statutory Mixtures for Inventory purposes, for more information,

contact SafetyDataSheet@honeywell.com.

National regulatory information

SARA 302 Components : No chemicals in this material are subject to the reporting requirements of SARA Title III,

Section 302.

: Quartz (SiO₂) 14808-60-7

SARA 313 Components : This material does not contain any chemical components with known CAS numbers that

exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section

313.

: Quartz (SiO₂) 14808-60-7

SARA 311/312 Hazards : Chronic Health Hazard

California Prop. 65 : WARNING! This product contains a chemical known to the State of California to cause

cancer.

Quartz (SiO₂) 14808-60-7

Massachusetts RTK : Quartz (SiO₂) 14808-60-7

New Jersey RTK : Quartz (SiO₂) 14808-60-7

Pennsylvania RTK : Quartz (SiO₂) 14808-60-7

WHMIS Classification : D2A: Very Toxic Material Causing Other Toxic Effects

This product has been classified according to the hazard criteria of the CPR and the MSDS

contains all of the information required by the CPR.

16. OTHER INFORMATION

		HMIS III	NFPA
Health hazard	:	1*	1
Flammability	:	0	0
Physical Hazard	:	1	
Instability	:	1	

^{* -} Chronic health hazard

Hazard rating and rating systems (e.g. HMIS®III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Disclaimer

For approved uses only. Not for drug, household, or other uses.

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. SKC Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Latest Change(s): Updated SDS to bring into compliance with the GHS

Last Update: December 2023

Publication 1991 Rev 231222 Page 7 of 7