



SAFETY DATA SHEET

According to JIS Z 7253:2019 **Revision date** 07-Feb-2024 Revision Number 5.03

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Molecular Sieves 5A 1/8
Product Code	137-08665
Supplier	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741
Emergency telephone number Recommended uses Restrictions on use	Fax: +81-6-6203-2029 +81-6-6203-3741 / +81-3-3270-8571 For research use only Seek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification <u>Classification of the substance or mixture</u> Germ cell mutagenicity Carcinogenicity Specific target organ toxicity (repeated exposure) Category 2 respiratory system, immune system, kidneys

Category 2 Category 1A Category 2

Pictograms

Signal word

Danger

Hazard statements

H341 - Suspected of causing genetic defects

H350 - May cause cancer

H373 - May cause damage to the following organs through prolonged or repeated exposure: respiratory system, immune system, kidneys

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
- Do not breathe dust/fume/gas/mist/vapors/spray
- Precautionary statements-(Response)
 - IF exposed or concerned: Get medical advice/attention
- Precautionary statements-(Storage)

Store locked up

Precautionary statements-(Disposal)

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

Others Other hazards

Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Mixture

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Molecular Sieves 5A	>70	N/A	N/A	N/A	69912-79-4
Clay Minerals	<30	N/A	N/A	N/A	N/A-13-0866-2
Silica sand	<4.9	60.08	(1)-548	*	14808-60-7

Note on ISHL No.:

* in the table means announced chemical substances.

Section 4: FIRST AID MEASURES

Inhalation

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

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up

Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage

Safe storage conditions

Storage conditions

Store away from sunlight in well-ventilated place at room temperature (preferably cool). Keep container tightly closed. Polyethylene No information available

Safe packaging material Incompatible substances

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Silica sand	TWA: 0.03 mg/m ³ OEL	N/A	TWA: 0.025 mg/m ³ respirable
14808-60-7			particulate matter

Personal protective equipment

Respiratory protection Hand protection Eye protection Skin and body protection Dust mask (JIS T 8151) chemical protective gloves (JIS T 8116) protective eyeglasses or chemical safety goggles Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form Color Appearance Odor Melting point/freezing point Boiling point, initial boiling point and boiling range Flammability Evaporation rate: Flammability (solid, gas): Upper/lower flammability or explosive limits Upper: Lower: Flash point Auto-ignition temperature:

grayish brown small pillar Odorless no data available Decomposition temperature: pH Viscosity (coefficient of viscosity) Dynamic viscosity Solubilities n-Octanol/water partition coefficient:(log Pow) Vapour pressure Specific Gravity / Relative density Vapour density Particle characteristics no data available no data available no data available no data available water and organic solvents : practically insoluble,or insoluble . no data available no data available no data available no data available Diameter : 2.9 - 3.5 mm

Section 10: STABILITY AND REACTIVITY

Stability

 Reactivity
 no data available

 Chemical stability
 Stable under recommended storage conditions.

 Hazardous reactions
 Stable under recommended storage conditions.

 None under normal processing
 Conditions to avoid

 Conditions to avoid
 stable under recommended storage conditions.

 Extremes of temperature and direct sunlight
 Incompatible materials

 No information available
 Hazardous decomposition products

 Carbon monooxide (CO), Carbon dioxide (CO2), Silicon compounds

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Silica sand Based on the NITE GHS Based on the NITE GHS Classification results. Based on the NITE GHS Classification results.	Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
classification results. classification results. classification results.	Silica sand	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS
		classification results.	classification results.	classification results.

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
Silica sand	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS
	classification results.	classification results.	classification results.

Skin irritation/corrosion

Chemical Name		Skin corrosio	on/irritation source	e information
Silica sand		Based on the NITE GHS classification results.		
Serious eye damage/ irritation				
Chemical Name		Serious eye damage/irritation source information		
Silica sand	I	Based on the NITE GH	S classification res	ults.
Respiratory or skin sensitization				
Chemical Name		Respiratory or Skin sensitization source information		
Silica sand		Based on the NITE GHS classification results.		
Reproductive cell mutagenicity				
Chemical Name		germ cell mutagencity source information		
Silica sand		Based on the NITE GHS classification results.		
Carcinogenicity				
Chemical Name		Carcinogenicity source information		
Silica sand		Based on the NITE GHS classification results.		
Chemical Name	NTP	IARC	ACGIH	JSOH (Japan)
Silica sand	Known	Group 1	A2	Group 1

14808-60-7	
Reproductive toxicity	
Chemical Name	Reproductive toxicity source information
Silica sand	Based on the NITE GHS classification results.
STOT-single exposure	·
Chemical Name	STOT -single exposure- source information
Silica sand	Based on the NITE GHS classification results.
STOT-repeated exposure	
Chemical Name	STOT -repeated exposure- source information
Silica sand	Based on the NITE GHS classification results.
Aspiration hazard	·
Chemical Name	Aspiration Hazard source information
Silica sand	Based on the NITE GHS classification results.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Silica sand	N/A	LL0 : Danio rerio	LL50 : Daphnia magna
		10,000 mg/L 96 h	> 10,000 mg/L 24 h

Other data

Chemical Name	Short-term (acute) hazardous to the	Long-term (chronic) hazardous to the
	aquatic environment source information	aquatic environment source information
Silica sand	Based on the NITE GHS classification	Based on the NITE GHS classification
	results.	results.

Persistence and degradability	No information available
Bioaccumulative potential	No information available
Mobility in soil	No information available
Hazard to the ozone layer	No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID UN number Proper shipping name: UN classfication Subsidiary hazard class Packing group	Not regulated -
Marine pollutant	Not applicable
IMDG UN number Proper shipping name: UN classfication Subsidiary hazard class	Not regulated -
Packing group Marine pollutant (Sea)	Not applicable

Transport in bulk according to
Annex II of MARPOL 73/78 and
the IBC CodeNo information availableIATANot regulatedUN number-Proper shipping name:
UN classfication
Subsidiary hazard class
Packing group
Environmentally HazardousNot applicable
Substance

Section 15: REGULATORY INFORMATION

<u>Japanese regulations</u> Fire Service Act Poisonous and Deleterious Substances Control Law	Not applicable Not applicable
Industrial Safety and Health Act	t Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57) Notifiable Substances (Law Art.57-2) Substances designated by the Minister of Health, Labor and Welfare as carcinogenic(Ordinance on Industrial Safety and Health Art.577, Para.2)
Regulations for the carriage and storage of dangerous goods in ship	Not applicable
Civil Aeronautics Law	Not applicable
Pollutant Release and Transfer Register Law (2023.4.1-)	Not applicable
Export Trade Control Order	Not applicable

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2)	Pollutant Release and Transfer Register Law (2023.4.1-)
Silica sand 14808-60-7(<4.9)	-	Applicable	-

	Section 16: OTHER INFORMATION
Key literature references and sources for data etc.	NITE: National Institute of Technology and Evaluation (JAPAN) http://www.safe.nite.go.jp/japan/db.html IATA dangerous Goods Regulations RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS Dictionary of Synthetic Oraganic Chemistry, SSOCJ, Koudansha Scientific Co.Ltd. Chemical Dictionary, Kyouritsu Publishing Co., Ltd. etc
Record of SDS revisions	The following contents were revised. Prodauct and company Identification. Hazards identification. Composition/information on ingredients. Exposure controls/personal protection. Physical and chemical properties. Stability and reactivity. Toxicological information. Regulatory information.

Disclaimer

This SDS is according to JIS Z 7253: 2019. 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, 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.

GHS Classification is according to JIS Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet