# Safety Data Sheet

## Section 1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name : Molecular Seive 3A

Product code (SDS NO) : BQN-G-41453_US-1

Relevant identified uses of the product : Desiccant

Uses advised against : Do not use for any purpose other than that recommended.

Details of the supplier of the safety data sheet

Manufacturer/Supplier : Mitsubishi Electric Corporation

Address : 5-1-14, Yada-minami, Higashi-ku, Nagoya-shi, Aichi 461-8670, Japan

Division : Laser Systems Dept.

Telephone number : +81-52-721-2111

FAX : +81-52-721-1941

## Section 2. Hazards identification

GHS classification and label elements of the product

### Classification of the substance or mixture

Classification according to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

HEALTH HAZARDS

Carcinogenicity: Category 1B

(Note) GHS classification without description: Not classified/Classification not possible

### Label elements

Labelling according to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Signal word: Danger

HAZARD STATEMENT

May cause cancer

PRECAUTIONARY STATEMENT

Prevention

Obtain special instructions before use.

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

Wear protective gloves/protective clothing/eye protection/face protection.

Response

IF exposed or concerned: Get medical advice/attention.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/national regulation.

Hazards not otherwise classified

None known.

## Section 3. Composition/information on ingredients

Mixture/Substance selection:

Mixture

| Ingredient name | CAS No. | Content (%) |
|---|---|---|
| Zeolite | 1318-02-1 | 70 - 100 |
| Clay minerals | 999999-99-4 | 7 - 30 |
| Crystalline silica (Quartz) | 14808-60-7 | 0.5 - 3 |
| Tetrasodium pyrophosphate | 7722-88-5 | 0.5 - 2 |
| Refractory ceramic fibers | 142844-00-6 | 0.1 - 1 |

Note : The figures shown above are not the specifications of the product.

The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## Section 4. First-aid measures

Descriptions of first-aid measures

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Wash contaminated clothing before reuse.

Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Do NOT induce vomiting.

Immediately call a POISON CENTER/doctor/physician.

Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

Protective measures for first aid

Protect yourself by wearing rubber gloves and air-tight safety goggles.

Indication of any immediate medical attention and special treatment needed

Information on indication of any immediate medical attention and special treatment needed is not vailable.

## Section 5. Fire-fighting measures

### Extinguishing media

#### Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

The product is non-flammable.

#### Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

### Specific hazards arising from the substance or mixture

Fire may produce irritating, corrosive and/or toxic gases.

### Advice for firefighters

#### Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Extinguish from the windward to the extent possible.

#### Special protective equipment and precautions for fire-fighters

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

## Section 6. Accidental release measures

### Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Stand at upwind. Evacuate personnel at downwind.

Stop leak if safe to do so.

### Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Do not wash away into sewers or waterway.

Avoid raising dust.

### Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Fill the disposal into labelled, closable containers.

## Section 7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Avoid breathing dust.

(Protective measures against fire and explosion)

Take action to prevent static discharges.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Precautions)

Avoid contact with skin.

Avoid contact with eyes.

Prevent generation and deposition of dust.

Safety Measures

Obtain special instructions before use.

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

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Use personal protective equipment as required.

Any incompatibilities

Water, Organic compounds(hydrocarbons, etc.),Hydrogen chloride should not be mixed with the chemicals.

Advice on general occupational hygiene

Do not get in eyes, on skin, or on clothing.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

Storage

Conditions for safe storage

Store in a well-ventilated place. Keep container tightly closed.

Keep cool. Protect from sunlight.

Store locked up.

Store in a dry place.

(Incompatible storage condition)

Keep away from water.

Protect from moisture.

Container and packaging materials for safe handling data is not available.

## Section 8. Exposure controls/personal protection

Control parameters

Occupational Exposure Limit

ACGIH

(Crystalline silica (Quartz))

TWA: 0.025mg/m3(R) (Pulm fibrosis; lung cancer)

(Refractory ceramic fibers)

TWA: 0.2f/cc(F) (Pulm fibrosis; pulm func)

OSHA-PEL

(Crystalline silica (Quartz))

TWA: (250/(%SiO2+5))mppcf,

(10mg/m3/(%SiO2+2))mg/m3 (Respirable)

(30mg/m3/(%SiO2+2))mg/m3 (Total Dust)

NIOSH-REL

(Crystalline silica (Quartz))

Ca; TWA: 0.05mg/m3; See Appendix A

Exposure controls

Appropriate engineering controls

Handle this material only in a totally enclosed system.

Use in a location equipped with a general ventilation system or local exhaust ventilation system.

Provide the safety shower facility, and hand/eye wash facility. And display their position clearly.

Individual protection measures

Respiratory protection

Particulate respirator

Hand protection

Chemical protective gloves Recommended material(s): impermeable or chemical resistant rubber

Eye protection

Wear safety glasses with side-shields or chemical safety goggle.

Skin and body protection

Chemical protective clothing, Chemical protective boots

## Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Solid

Color: Brown

Odor: None

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability: Non-flammable

Lower and upper explosion limit/flammability limit: Not applicable

Flash point: Non-flammable

Auto-ignition temperature: Not applicable

Decomposition temperature data is not available.

pH: 8 - 12(10% slurry)

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

Partition coefficient n-octanol/water data is not available.

Vapor pressure data is not available.

Density and/or relative density: 0.6 - 0.9g/cm3

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

## Section 10. Stability and Reactivity

### Reactivity

Reactivity data is not available.

### Chemical stability

Stable under normal storage/handling conditions.

Moisture absorbent.

### Possibility of hazardous reactions

If the material is suddenly brought into contact with high concentrations of chemicals with high heats of adsorption, such as hydrocarbons or hydrogen chloride, heat generation may occur.

### Conditions to avoid

Keep away from water.

Protect from moisture.

### Incompatible materials

Water, Organic compounds (hydrocarbons, etc.), Hydrogen chloride

### Hazardous decomposition products

The following substances are produced by pyrolysis.

Irritating gases and/or vapors

## Section 11. Toxicological Information

Information on toxicological effects

### Acute toxicity

Acute toxicity (Oral)

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Acute toxicity (Dermal)

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Acute toxicity (Inhalation)

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Irritant properties

Skin corrosion/irritation

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Serious eye damage/irritation

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Sensitization

Respiratory sensitization

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Skin sensitization

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Germ cell mutagenicity

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Carcinogenicity

[Product]

Category 1B, May cause cancer

[Data for components of the product]

[Table 3 of Annex VI to the CLP Regulations]

(Refractory ceramic fibers)

Category 1B

[IARC]

(Zeolite)

Group 3 : Not classifiable as to its carcinogenicity to humans

(Crystalline silica (Quartz))

Group 1 : Carcinogenic to humans

(Refractory ceramic fibers)

Group 2B : Possibly carcinogenic to humans

[ACGIH]

(Crystalline silica (Quartz))

A2: Suspected Human Carcinogen

(Refractory ceramic fibers)

A2: Suspected Human Carcinogen

[NTP]

(Crystalline silica (Quartz))

Known : Known to be Human Carcinogens

Reproductive toxicity

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Specific target organ toxicity (STOT)

STOT-single exposure

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

STOT-repeated exposure

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Aspiration hazard

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

## Section 12. Ecological Information

Toxicity

Aquatic toxicity

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Water solubility

(Crystalline silica (Quartz))

none (source: ICSC, 2016)

(Tetrasodium pyrophosphate)

not poorly water-soluble (58.5 g/L (EU Method A.6, GLP)) (source: NITE)

(Refractory ceramic fibers)

none (source: ICSC, 2012)

Persistence and degradability

Persistence and degradability data is not available.

Bioaccumulative potential

Bioaccumulative potential data is not available.

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

Dispose to an authorized waste collection point.

Do not dump into sewers, on the ground or into any body of water.

Prevent dust generation when dispose of the product.

Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

UN No., UN CLASS

UN Number or ID Number : Not regulated

UN Proper Shipping Name : Not regulated

Class or division (Transport hazard class) : Not regulated

Packing group : Not regulated

IMDG Code (International Maritime Dangerous Goods Regulations)

UN Number or ID Number : Not regulated

UN Proper Shipping Name : Not regulated

Class or division (Transport hazard class) : Not regulated

Packing group : Not regulated

IATA (Dangerous Goods Regulations)

UN Number or ID Number : Not regulated

UN Proper Shipping Name : Not regulated

Class or division (Transport hazard class) : Not regulated

Packing group : Not regulated

Environmental hazards

Marine pollutants (yes/no) : no

Special precautions for user

Special precautions for user is not applicable.

Maritime transport in bulk according to IMO instruments

Not applicable to Transport in bulk according to Annex II of MARPOL and the IBC Code

MARPOL Annex V - HME (Harmful to the Marine Environment)

Carcinogenicity: cat.1, 1A, 1B

Refractory ceramic fibers

## Section 15. Regulatory Information

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

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Tetrasodium pyrophosphate; Crystalline silica (Quartz)

Superfund Amendments and Reauthorizations Act (SARA), Title III

This product contains no chemicals subjected to reporting levels established by SARA Title III, Section 313.

California proposition 65

WARNING: This product can expose you to chemical(s), which is(are) known to the State of California to cause cancer, and/or chemical(s), which is (are) known to the State of California to cause birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.

Cancer

Crystalline silica (Quartz) (Cancer (as Silica, crystalline (airborne particles of respirable size)))

Other regulatory information

We are not able to check up the regulatory information with regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

## Section 16. Other information

GHS classification and labelling

Carcinogenicity, Category 1B: H350 May cause cancer

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN
IMDG Code, 2024 Edition (Incorporating Amendment 42-24)
IATA Dangerous Goods Regulations (66th Edition) 2025
2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2025 TLVs and BEIs. (ACGIH)
Supplier's data/information
OSHA Hazard Communication Standard - 2024 (29 CFR 1910.1200)
GESTIS-Stoffdatenbank
Pub Chem (OPEN CHEMISTRY DATABASE)

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety. The GHS classification data given here is based on current EU official data (Consolidated version of the CLP Regulation published in 01/12/2023 and Commission delegated regulation (EU) 2024/197 (ATP21)).