Reference No.: MI-7002T-3 Filter Pad NA-12 Toyo Roshi Kaisha, Ltd. 1/5
Issued : September 13, 2017
Revised : October 15, 2019

Safety Data Sheet

1. Chemical product and Company Information

Name of chemical : Filter Pad NA-12

Supplier's name, address and phone number

Company : Toyo Roshi Kaisha, Ltd.

Address : Hibiya-Kokusai BLDG 5F, 2-2-3,

Uchisaiwaicho,Chiyoda-ku, Tokyo, 100-0011 Japan

Section in charge : Quality Assurance Division

Phone : +81-3-5521-2176 Fax : +81-3-5521-2177

Mail address : trk-hinsho@advantec.co.jp

Recommended application : Clarification filtration of liquid

Use restrictions : In case of other purpose of use, please contact

us to discuss.

2. Hazard Summary

GHS classification of chemicals

Physical hazard : Not classified.

Human health hazard

Carcinogenicity : Category 1A

Environmental hazard : Classification not possible.

GHS Label element

Pictograms or symbols :



Signal words : Danger

Hazard statements : Potential risk for cancer.

Prolonged or repeated inhalation exposure causes lung

damage.

Precautionary statements : Avoid breathing dust.

If there is not sufficient ventilation, wear respiratory

protective equipment.

3. Composition and Information on ingredients

Chemical substances/Mixtures : Mixtures
Chemical name or general name : Filter Pad
Ingredients and Concentration or concentration range

: Cellulose (CAS No.65996-61-4)

: Diatomaceous earth (CAS No.61790-53-2,CAS No.68855-54-9

CAS No.91053-39-3)

Cristobalite (CAS No.14464-46-1) <11% Quartz (CAS No.14808-60-7) < 2%

: Polyamide epichlorohydrin resin

Reference No.: MI-7002T-3 Filter Pad NA-12 Toyo Roshi Kaisha, Ltd. 2/5

Issued: September 13, 2017 Revised: October 15, 2019

Reference Number in Gazetted List in Japan

Law Concerning the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

: Diatomaceous earth

(1)-548 Cristobalite (1)-548 Quartz

(7)-1961 Polyamide epichlorohydrin resin

Japan's Industrial Safety and Health Law: Diatomaceous earth

Appendix No.9-165-2 Silica Cristobalite Appendix No.9-165-2 Silica Quartz

Ingredients applicable to GHS classification

: Due to the use of natural minerals(Diatomaceous earth), the product contains up to 13wt% of crystalline silica.

4. First Aid Measures

Inhalation : If inhaled, move to a fresh air, blow nose, gargle.

If inhaled in large quantities, flush the nostrils with water and if there are any

abnormalities, seek medical attention.

Skin contact : Not applicable.

Eye contact : Immediately wash thoroughly with clean running water. In case of abnormality,

consult with a physician.

Ingestion : In case of abnormality, consult with a physician.

5. Fire Fighting Measures

Appropriate extinguishing media : Plenty of water (spray), dry chemicals, carbon dioxide,

foam chemicals, and halogen media.

Unacceptable extinguishing media : No data available.

6. Accidental Release Measures

Personal precautions, Protective equipment and

emergency procedures : No data available.

Precautions for environment : No data available.

Containment and purification procedures and equipment

: No data available.

7. Handling and Storage

Handling : Be careful with the handling of firearms.

Storage : In order to prevent the alteration and/or deterioration

caused by moisture absorption, seal the container tightly

and store the container at a cool and dark place. Do not store with oxides and/or organic peroxides. Reference No.: MI-7002T-3 Filter Pad NA-12 Toyo Roshi Kaisha, Ltd. 3/5

Issued: September 13, 2017 Revised: October 15, 2019

8. Exposure controls / Personal protection

Administrative concentration : No data available.

Acceptable concentration Japan Society for Occupational Health

: Respirable dust $0.5 mg/m^3$ (Diatomaceous earth)

: Total dust 2.0mg/m³ (Diatomaceous earth)

ACGIH : 0.025mg/m³ (Cristobalite)

 $: 0.025 \text{mg/m}^3$ (Quartz)

Facility provision : Take as needed.

Protective equipment : Use appropriate protective tools if necessary.

9. Physical and Chemical Properties

Physical state : Solid, Paperboard with a thickness of approx. 3.5mm.

Color : Milky white.

Odor : None.

Melting point / Freezing point : No data available. Boiling point or initial boiling point and Boiling range

: No data available.

Flammability : Yes.

Lower limit and Upper limit of explosion/ Flammable limit

: Not applicable.

Flash point : Not applicable.

Spontaneous firing point : Not applicable.

Decomposition temperature : Not applicable.

pH : No data available.

Kinematic viscosity : Not applicable.

Solubility : Insoluble in water.

n-octanol / water partition coefficient : No data available.

n-octanol / water partition coefficient : No data available.

Steam pressure : No data available.

Density or relative density : No data available.

Relative gas density : Not applicable.

Particle characteristics : No data available.

10. Stability and Reactivity

Reactivity : Stable under normal handling. Chemical stability : Stable under normal handling.

Possibility of hazardous reactions : No data available.

Conditions to avoid : Direct sunshine, ultraviolet, wetting, high temperature,

high humidity, open-air storage. Avoid contact with strong oxidizers.

Incompatible materials : No data available.

Hazardous decomposition products : No data available.

Reference No.: MI-7002T-3 Filter Pad NA-12 Toyo Roshi Kaisha, Ltd. 4/5

Issued: September 13, 2017 Revised: October 15, 2019

11. Toxicological Information

Acute toxicity

Oral : Classification not possible due to lack of data.

Dermal : Classification not possible due to lack of data.

Inhalation: gas : Not classified. Inhalation: vapour : Not classified.

Inhalation: dust, mist : Classification not possible due to lack of data.

(As an ingredient)

Although it contains crystalline silica, which is considered to be dangerous if it is inhaled, classification is not possible due to lack of data.

(Diatomaceous earth)

Skin corrosion / Irritation

Serious eye damage and eye irritation Respiratory / Skin sensitization

Germ cell mutagenicity

Carcinogenicity

: Classification not possible due to lack of data.

: Classification not possible due to lack of data.: Classification not possible due to lack of data.: Classification not possible due to lack of data.

: Category 1A

It is categorized as "Category 1A" due to it's content of a cut-off value (0.1%) or higher of Carcinogenicity Category 1, as the crystalline silica applicable under

Category 1A

(As an ingredient)

Category 1A Contains crystalline silica that may

harm your health if inhaled.

IARC classifies crystalline silica as carcinogenic

to humans (Group 1).

Crystalline silica is listed on NTP as a

carcinogen. (Diatomaceous earth)

Reproductive toxicity : Classification not possible due to lack of data.

Specific target organ toxicity (Single exposure)

: Classification not possible due to lack of data.

Specific target organ toxicity (Repeated exposure)

: Classification not possible due to lack of data.

(As an ingredient)

It is known that crystalline silica could cause

silicosis, a non-cancerous disease.

(Diatomaceous earth)

Aspiration hazard : Classification not possible due to lack of data.

12. Ecological Information

Ecotoxicity

Hazardous to the aquatic environment (acute)

: Classification not possible due to lack of data.

Hazardous to the aquatic environment (chronic)

: Classification not possible due to lack of data.

Persistence and Degradability : No data available. Bioaccumulative potential : No data available. Mobility in soil : No data available.

Ozone layer hazard : Classification not possible due to lack of data.

Reference No.: MI-7002T-3 Filter Pad NA-12 Toyo Roshi Kaisha, Ltd. 5/5

Issued: September 13, 2017 Revised: October 15, 2019

13. Disposal Considerations

Dispose in accordance with federal, state and local regulations.

Just like disposal of general industrial waste, ask for industrial waste disposer accepted by prefectural governors or for a local public agency for disposal.

When incinerating the material, use the specific incineration facility. Take appropriate procedure that satisfies Clean Air Act, Waste Disposal and Public Cleaning Law, and Clean Water Law. (We recommend disposing the material as industrial waste.)

14. Transport Information

Regulatory information and local regulations

: There are no domestic regulations.

15. Regulatory Information

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture etc.

Japanese Chemical Substances Control Act.

: Existing Chemical Substances(1)-548 Cristobalite Existing Chemical Substances(1)-548 Quartz

Existing Chemical Substances(7)-1961 Polyamide epichlorohydrin resin

Japan's Industrial Safety and Health Act.

: Hazards and harmful substances should be displayed or notified

Appendix No.9-165-2 Silica Cristobalite Appendix No.9-165-2 Silica Quartz

16. Other information

Handling of written contents

Contents of this data sheet are based on materials, information, and data acquirable at this point and are subject to revision due to new knowledge.

In addition, contents such as contained amount, physical and chemical properties, and hazards identification are not subject of any guarantee. These precautions are applied only during standard handling. If the material is used in a special way, take appropriate safety measures that correspond to actual applications and usages.

Each user is responsible to take appropriate measures with due consideration of contents in this sheet.

Please note that this Material Safety Data Sheet is created according to Japanese law.

List of references

- Classification method of chemicals based on GHS(JIS Z 7252: 2019)
- Hazard communication of chemicals based on GHS Labelling and Safety Data Sheet (SDS) (JIS Z 7253: 2019)