

Safety Data Sheet

1. Product and Company Information

Product name	: PTFE Type Membrane Filter
Supplier company name, address, phone number	
Company	: Toyo Roshi Kaisha, Ltd.
Head office	: Hibiya-Kokusai BLDG 5F, 2-2-3 Uchisaiwaicho, Chiyoda-ku, Tokyo, 100-0011 Japan
Section in charge	: Quality Assurance Department
Phone	: +81-3-5521-2176
Fax	: +81-3-5521-2177
E-mail	: trk-hinsho@advantec.co.jp
Recommended application	: Liquid and air filtration
Restrictions in use	: • Please consult us for other uses.

2. Hazard Summary

GHS Classification	
Physical hazards	: Not applicable to the classification.
Human health hazard	: Cannot be classified.
Environmental hazard	: Cannot be classified.
Label element	: N/A

3. Composition and Information on ingredients

Chemical substance/Mixture	: Chemical substances
Chemical name or general product name	: Membrane Filter
Ingredients and Content	: Polytetrafluoroethylene (CAS No.9002-84-0)
Reference Number in Gazetted List in Japan	
• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture etc.	: (6)-939 Polytetrafluoroethylene
• Japanese Chemical Substances Control Act.	
Japan's Industrial Safety and Health Act.	: Not applicable.

4. First Aid Measures

Inhalation	: If fumes are inhaled when burned, you might experience polymer fume fever with temporary symptoms such as fever, chills, and continuous cough for around 24 hours.
Skin contact	: No data available.
Eye contact	: Immediately wash with clean water for 5 minutes. Contact physician if necessary.
Ingestion	: Immediately spit it out. Immediately consult with a physician if you drank a sufficient amount.

5. Fire Fighting Measures

Extinguishing media	: Plenty of water, dry chemicals, abc, carbon dioxide.
Unacceptable extinguishing media	: No data available.

Extinguishing procedure	:	In the event of a fire, since harmful gas (HF, COF ₂ , CO, CF ₂ =CF ₂ , CO ₂ , etc.) Could be generated, firefighters should wear chemical cartridge respirators (organic or acidic gas absorption) or air respirators in addition to the normal protective equipment.
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6. Accidental Release Measures		
Personnel precautions, protective equipment and emergency procedures	:	No data available.
Precautions for environment	:	No data available.
Methods and materials for containment and cleaning up	:	No data available.
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7. Handling and Storage		
Handling	:	As the material may generate harmful gas when it is exposed to high temperatures, avoid touching it or exposing it to a heat source. Keep away from metals such as alkali metals, aluminum and magnesium.
Storage	:	Avoid direct sunlight, ultraviolet light, moisture, high and low temperatures, high humidity, open-air storage, ignition sources. As the material may react and decompose by coming in contact with alkaline metals, avoid contacting with those types of metals. If a total stored amount exceeds 3,000 kg, follow Fire Defense Law (specific combustible material: synthetic resins).
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8. Prevention of exposure and human body protection		
Acceptable concentration	:	No data available.
Japan Society for Occupational Health		
Acceptable concentration	:	No data available.
ACGIH		
Facility provision	:	If a person is exposed to decomposed gas generated by the heated unit at a temperature higher than 260 degree Celsius, provide a local exhaust ventilation.
Protective equipment	:	Use appropriate protective tools if necessary.
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9. Physical and Chemical Properties		
Physical property	:	Solid, porous film.
Color	:	White.
Odour	:	N/A
Melting point / Freezing point	:	327°C. (melting point)
Boiling point or initial boiling point and boiling range	:	No data available.
Flammability	:	Yes.
Lower explosion limit and upper explosion limit / Flammability limit	:	Not applicable.
Flash point	:	Not applicable.
Spontaneous ignition point	:	No data available.
Decomposition temperature	:	Above 260°C
pH	:	No data available.
Kinematic viscosity	:	Not applicable.

Solubility	:	Insoluble to water, general purpose solvent.
n-octanol / Water partition coefficient	:	No data available.
Vapor pressure	:	No data available.
Density or relative density	:	No data available.
Relative gas density	:	Not applicable.
Particle characteristics	:	No data available.
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10. Stability and Reactivity		
Reactivity	:	Stable under normal handling.
Chemical Stability	:	Stable under normal handling.
Possibility of hazardous reactions	:	High temperatures can result in decomposition of hazardous components.
Conditions to avoid	:	The material will begin to decompose very slowly when the temperature is above 260 degrees Celsius. Above 400 degrees Celsius, the decomposition speed will increase.
Hazardous substances for mixing	:	Metal powder such as aluminum and/or magnesium. Fluorinated compound such as F ₂ and/or Cl ₃ F.
Hazardous decomposition products	:	Generates harmful Perfluoroisobutylene above 470 degrees. Others generates fluorinated compound (harmfulness is low).
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11. Toxicological Information		
Acute toxicity		
(oral)	:	Cannot be classified due to lack of data.
(dermal)	:	Cannot be classified due to lack of data.
(inhalation: gases)	:	Cannot be classified due to lack of data.
(inhalation: vapours)	:	Cannot be classified due to lack of data.
(inhalation: dust and mist)	:	Cannot be classified due to lack of data.
Skin corrosion/ Irritation	:	Cannot be classified due to lack of data.
Serious eye damage/ eye irritation	:	Cannot be classified due to lack of data.
Respiratory sensitization / Skin sensitization	:	Cannot be classified due to lack of data.
Germ cell mutagenicity	:	Cannot be classified due to lack of data.
Carcinogenicity	:	Cannot be classified due to lack of data.
Reproductive toxicity	:	Cannot be classified due to lack of data.
Specific target organ toxicity - Single exposure	:	Cannot be classified due to lack of data.
Specific target organ toxicity - Repeated exposure	:	Cannot be classified due to lack of data.
Aspiration hazard	:	Cannot be classified due to lack of data.
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12. Ecological Information		
Ecotoxicity		
Hazardous to the aquatic environment (acute)	:	Cannot be classified due to lack of data.
Hazardous to the aquatic environment (chronic)	:	Cannot be classified 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	:	Cannot be classified due to lack of data.

13. Disposal Considerations

Dispose it in accordance with national, prefectural and local regulations.

The same as general industrial waste, outsource industrial waste disposal companies or local public organizations who are authorized by governors.

In case of the incineration, use controlled incinerator following Air Pollution Control Law, Waste Disposal & Public Cleaning Law and Water Pollution Control Law. (We recommend disposing the material as an industrial waste.)

14. Transportation Notes

Regulatory information in case there are : Fire Defense Law under flammable objects.
domestic regulations.

15. Applicable Law

Japan Industrial Safety and Health Act.	:	Existing Chemical Substances (6)-939 Polytetrafluoroethylene
Fire Defense Law	:	Article 9-4 (Standard for storage and handling of hazardous material with less than specified amounts) Article 1-12 on regulations of hazardous materials, and Group 4 specific flammable materials (synthetic resins. If a total amount is 3,000 kg, follow Fire Defense Law. If a total amount is less than 3,000 kg, follow the regulations defined by municipal ordinance for storage and handling of the material.).

16. Note:

The descriptions in this Safety Data Sheet are made based on the literature, information or data that we can obtain at this moment but subject to be revised with new knowledge in the future.

The content, physical and chemical properties, hazards, etc. do not provide any assurance, and precautions are intended for normal handling. For special handling, take appropriate safety measures for the intended use.

Please take that this safety data sheet is for your reference and take appropriate measures in accordance with actual conditions under your responsibility.

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

Reference Literature

- Classification of chemicals based on “Globally Harmonized System of Classification and Labelling of Chemicals (GHS)” (JIS Z 7252:2019)
 - Communicating hazard information on labels based on GHS—Labelling, Posting in the workplace and Safety Data Sheet (SDS) (JIS Z 7253:2019)
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