PTFE Membrane Capsule Cartridge Filter CCF-(005,A10,010,020,100) -(C,D,E)1B(S) CCF-(005,A10,010,020,100) -(D,E)1D(S) CCF-(005,A10,010,020,100) -(C,D,E)1H(S) CCF-(005,A10,010,020,100) -(C,D,E)1N(S) Toyo Roshi Kaisha, Ltd. 1/5 Issued Date: October 20, 2000 Revised Date: October 15, 2019

Safety Data Sheet

1.	Product and Company Information Product name Supplier company name, address, phone	:	PTFE Membrane Capsule Cartridge Filter CCF-(005,A10,010,020,100) -(C,D,E)1B (S) * CCF-(005,A10,010,020,100) -(D,E)1D (S) * CCF-(005,A10,010,020,100) -(C,D,E)1H (S) * CCF-(005,A10,010,020,100) -(C,D,E)1N (S) * * S : Sterile type. However, the sterilized type is only CCF-020 and CCF- 050.
	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 Division
	Phone	:	+81-3-5521-2176
	Fax	:	+81-3-5521-2177
	E-mail	:	trk-hinsho@advantec.co.jp
	Recommended application	:	Liquid Microfiltration
	Restrictions in use	:	 Used only for general industrial use. Cannot be used for liquids without chemical resistance. Cannot be used for gas. Inline steam sterilization can't be performed. In case of organic solvent filtration, an electrified prevention countermeasure is needed. Liquids with a surface tension of 32mN/m or higher cannot normally be filtered. When filtering, alcohol substitution is needed. Repeated autoclave sterilization may damage the filter.
2.	Hazard Summary GHS Classification Physical hazards Human health hazard	:	Not applicable to the classification. Not applicable to the classification.
	Environmental hazard	:	Not applicable to the classification.
	Label element	:	N/A
3.	Composition and Information on ingredients Chemical substance/Mixture Chemical name or general product name	:	Mixtures Cartridge Filter

C CC CC		CCF-(005,A10,010,020 CCF-(005,A10,010,020, CCF-(005,A10,010,020,	PTFE Membrane Capsule Cartridge Filter CCF-(005,A10,010,020,100) -(C,D,E)1B(S) CCF-(005,A10,010,020,100) -(D,E)1D(S) CCF-(005,A10,010,020,100) -(C,D,E)1H(S) CCF-(005,A10,010,020,100) -(C,D,E)1N(S)		Toyo Roshi Kaisha, Ltd. 2/5 Issued Date: October 20, 2000 Revised Date: October 15, 2019	
Ingredients and Conten		t :		Polytetrafluo	oroethylene (CAS No.9002-84-0) (Filter)	
	Reference Number in	Gazetted List in				
	Japan • Act on the Evalua Substances and Reg Manufacture etc. • Japanese Chemica Control Act.	ulation of Their al Substances	:		lytetrafluoroethylene 02 Polypropylene	
	Japan's Industrial Sa Act.	fety and Health	:	Not applicab	le.	
4.	First Aid Measures Inhalation		:	decompositio type symptom joint pain, coughing, c	hills, palpitations, and chest	
	Skin contact			Not applicabl	Consult with a physician. le.	
	Eye contact		:	Not applicabl		
	Ingestion		:	Not applicabl		
5.	Fire Fighting Measures					
	Extinguishing media Unacceptable extinguis	shing media	:	•	er (spray), dry chemicals, carbon n chemicals, and halogen media. able.	
6.	Accidental Release Measur Personnel precautions, equipment and emerge	protective ncy procedures	:	No data avail		
	Precautions for environ		:	No data avail		
	Methods and material and cleaning up	s for containment	:	No data avail	able.	
7.	Handling and Storage Handling Storage		:	when it is exp touching it or Avoid conta metal, alumin Avoid direct moisture, hig	rial, may generate harmful gas posed to high temperature, avoid exposing it to a heat source. ct with metals such as alkali num, and magnesium. sunlight, ultraviolet light, h and low temperatures, high en-air storage, strong acids and	
		9	/5	strong bases. Fire Act(Desi Synthetic Res	ignated Flammable Goods: sins) is applicable in case of 3,000kg and over.	

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PTFE Membrane Capsule Cartridge Filter CCF-(005,A10,010,020,100) -(C,D,E)1B(S) CCF-(005,A10,010,020,100) -(D,E)1D(S) CCF-(005,A10,010,020,100) -(C,D,E)1H(S) CCF-(005,A10,010,020,100) -(C,D,E)1N(S)

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8.	Acceptable concentration		n No data available.		
	Japan Society for Occupational Health Acceptable concentration ACGIH	:	No data available.		
	Facility provision	:	Take effective measures if necessary.		
	Protective equipment	:	Use appropriate protective tools if necessary.		
9.	Physical and Chemical Properties				
	Physical property	:	Solid, Capsule-shaped filter.		
	Color	:	Translucent.		
	Odour	:	N/A		
	Melting point / Freezing point	:	No data available.		
	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	:	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.		
	Vapor 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.		
			The material will begin to decompose very slowly when the temperature is above 260°C.Above 400°C, the decomposition speed will increase. Various decomposition temperature level and		
			decomposition component; Above 430°C-Tetrafluoroethylene Above 440°C-Hexafluoropropylene Above 475°C-Perfluoroisobutylene Above 500°C-Carbonyl fluoride		
	Chemical Stability	:	Stable under normal handling.		
	Possibility of hazardous reactions	:	No data available.		
	Conditions to avoid	:	As the material may generate harmful gas when it is exposed to high temperature, avoid touching it or exposing it to a heat source.		

Reference No. : MG-0028J-18 PTFE Membrane C CCF-(005,A10,010,02 CCF-(005,A10,010,020 CCF-(005,A10,010,020 CCF-(005,A10,010,020			0,100) -(C,D,E)1B(S) Issued Date: October 20, 2000 ,100) -(D,E)1D(S) Revised Date: October 15, 2019 ,100) -(C,D,E)1H(S) Revised Date: October 15, 2019		
	Hazardous substances for mixing Hazardous decomposition products	:	Avoid direct sunlight, ultraviolet light, moisture, high and low temperatures, high humidity, open-air storage, strong acids and strong bases. No data available. Tetrafluoroethylene, Hexafluoropropylene, Perfluoroisobutylene, Carbonyl fluoride.		
11.	Toxicological Information				
	Acute toxicity		Cannot be classified due to lack of data.		
	Serious eye damage/ eye irritation	:	Cannot be classified due to lack of data.		
	Respiratory sensitization / Skin	:	Cannot be classified due to lack of data.		
	sensitization 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	:	Cannot be classified due to lack of data.		
	exposure	•			
	Specific target organ toxicity - Repeated	:	Cannot be classified due to lack of data.		
	exposure		Connot he classified due to look of date		
	Aspiration hazard	:	Cannot be classified due to lack of data.		
12.	Ecological Information				
	Ecotoxicity				
	Hazardous to the aquatic environment	:	Cannot be classified due to lack of data.		
	(acute) Hazardous to the aquatic environment (chronic)	:	Cannot be classified due to lack of data.		
	Persistence and Degradability	:	No data available.		
	Bioaccumulative potentional	:	No data available.		
	Mobility in soil	:	No data available.		
	Ozone layer hazard	:	No data available.		
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 domestic regulations.	:	Applicable as designated Flammables in the Fire Service Act.		
15.	 Applicable Law Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture etc. Japanese Chemical Substances Control Act. 	:	Existing Chemical Substances (6)-939 Polytetrafluoroethylene (6)-10, (6)-402 Polypropylene		

Reference No. : MG-0028J-18	PTFE Membrane Capsule (CCF-(005,A10,010,020,100) CCF-(005,A10,010,020,100) -(CCF-(005,A10,010,020,100) -(CCF-(005,A10,010,020,100)	-(C,D,E)1B(S) (D,E)1D(S) (C,D,E)1H(S)	Toyo Roshi Kaisha, Ltd. 5/5 Issued Date: October 20, 2000 Revised Date: October 15, 2019
Fire Defense Law	:	of hazardous designated a Article 1-12 materials Appendix 4 materials (Sy 3,000 kg or c total amount regulations d	Standard for storage and handling material with less than mount) 2 on regulations of hazardous Designated specific flammable ruthetic resin. If the total amount is over, follow Fire Service Act. If the is less than 3,000 kg, follow the lefined by municipal ordinance for andling of the materials.)

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)