Toyo Roshi Kaisha, Ltd. 1/4 Issued : February 17, 1997 Revised : October 25, 2019

Safety	Data	Sheet
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1. Chemical product and Compa	ny Information			
Name of chemical	: Cellulose Acetate Type	Membrane Filter		
Supplier's name, add	ress and phone number			
Company	: Toyo Roshi Kaisha, Ltd	: Toyo Roshi Kaisha, Ltd.		
Address	: Hibiya-Kokusai BLDG	5F, 2-2-3,		
	Uchisaiwaicho, Chiyoda			
	Tokyo, 100-0011 Japan			
Section in charge	: Quality Assurance Divi	sion		
Phone	: 81-(0)3-5521-2176			
Fax	: 81-(0)3-5521-2177			
Mail address	: trk-hinsho@advantec.co			
Recommended applicat	-			
Use restrictions		: In case of other purpose of use, please		
	contact us to discuss.			
2. Hazard Summary				
GHS classification of cher	nicals			
Physical hazard	: Not classified.			
Human health hazard	: Classification not possible.			
Environmental hazard	: Classification not possible.			
GHS Label element	: None.			
3. Composition and Information	on ingredients			
Chemical substances/M	-			
Chemical name or gener	al name : Membrane Filter			
-	ration or concentration range			
e	: Cellulose acetate	(CAS No.9004-35-7		
	Wetting agent	<b>`</b>		
Reference Number in G	00			
Law Concerning the l	Evaluation of Chemical Substances and Reg	gulation of Their		
Manufacture, etc.	: (8)-165	Cellulose acetate		
Japan's Industrial Safe	ety and Health Law			
	: Not applicable.			
4. First Aid Measures				
Inhalation : Not app	licable.			
Skin contact : Not app				
11	ately wash thoroughly with clean running w	ater.		
	of abnormality, consult with a physician.			
Ingestion : Rinse n				
Do not	orce vomiting.			
	lical attention and diagnosis.			

	pe Membrane Filter	Toyo Roshi Kaisha, Ltd. 2/4 Issued : February 17, 1997 Revised : October 25, 2019	
5. Fire Fighting Measures			
Appropriate extinguishing media	: water (spray), dry c	chemicals, alcohol resistant foam	
	chemicals, carbon dioxide and dry sand etc. : Straight stream water discharge		
Unacceptable extinguishing media			
Extinguishing procedure	: Use appropriate extinguishing agents according to the type of fire. Move containers from fire area if it is not too dangerous.		
6. Accidental Release Measures			
Personal precautions, Protective equipme	ent and		
emergency procedures	: No data available.		
Precautions for environment	: No data available.		
Containment and purification procedure	res and equipment		
	: No data available.		
7. Handling and Storage			
Handling		handling of firearms.	
Storage	-	the alteration and/or deterioration	
	-	absorption, seal the container tightly	
		iner at a cool and dark place.	
		xides and/or organic peroxides.	
		unt exceeds 1,000 kg, follow Fire	
	per waste).	fic combustible material : rag and	
	per waste).		
Acceptable concentration	N 17 111		
Acceptable concentration Japan Society for Occupational Health			
Japan Society for Occupational Health ACGIH	: No data available.		
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision	: No data available. : Take as needed.	stative tools if percent	
Acceptable concentration Japan Society for Occupational Health ACGIH	: No data available. : Take as needed.	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties	: No data available. : Take as needed. : Use appropriate pro	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate pro</li> <li>Solid, porous film.</li> </ul>	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate pro</li> <li>Solid, porous film.</li> <li>White.</li> </ul>	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color Odor	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate pro</li> <li>Solid, porous film.</li> <li>White.</li> <li>None.</li> </ul>	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color Odor Melting point / Freezing point	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate provide the provided of the prov</li></ul>	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color Odor	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate provide the provided of the prov</li></ul>	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color Odor Melting point / Freezing point Boiling point or initial boiling point and	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate provide the provided of the prov</li></ul>	otective tools if necessary.	
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Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color Odor Melting point / Freezing point Boiling point or initial boiling point and Flammability	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate provide the provided of the prov</li></ul>	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color Odor Melting point / Freezing point Boiling point or initial boiling point and Flammability	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate provide the provided of the prov</li></ul>	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color Odor Melting point / Freezing point Boiling point or initial boiling point and Flammability Lower limit and Upper limit of explosion	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate provide a propriate provide a propriate provide a propriate provide a provide</li></ul>	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color Odor Melting point / Freezing point Boiling point or initial boiling point and Flammability Lower limit and Upper limit of explosion Flash point	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate provide the provided of the prov</li></ul>	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color Odor Melting point / Freezing point Boiling point or initial boiling point and Flammability Lower limit and Upper limit of explosion Flash point Spontaneous firing point	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate provide the provided state of th</li></ul>	otective tools if necessary.	
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color Odor Melting point / Freezing point Boiling point or initial boiling point and Flammability Lower limit and Upper limit of explosion Flash point Spontaneous firing point Decomposition temperature pH Kinematic viscosity	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate provide the provided the provide the provided the provide the provided the provide</li></ul>		
Acceptable concentration Japan Society for Occupational Health ACGIH Facility provision Protective equipment 9. Physical and Chemical Properties Physical state Color Odor Melting point / Freezing point Boiling point or initial boiling point and Flammability Lower limit and Upper limit of explosion Flash point Spontaneous firing point Decomposition temperature pH	<ul> <li>No data available.</li> <li>Take as needed.</li> <li>Use appropriate provide the provided the provide the provided the provide the provided the provide</li></ul>	Otective tools if necessary.	

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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 sunlight, ultraviolet light, water leakage, high temperature, high humidity and outdoor storage.
Incompatible materials	: Oxidant.
Hazardous decomposition products	: Carbon monoxide and carbon dioxide.
11. Toxicological Information	
Acute toxicity	
Oral	: Not classified.
Dermal	: Classification not possible due to lack of data.
Inhalation: gas	: Classification not possible due to lack of data.
Inhalation: vapour	: Classification not possible due to lack of data.
Inhalation: dust, mist	: Classification not possible due to lack of data.
Skin corrosion / Irritation	: Classification not possible due to lack of data.
Serious eye damage and eye irritation	: Classification not possible due to lack of data.
Respiratory / Skin sensitization	: Classification not possible due to lack of data.
Germ cell mutagenicity	: Classification not possible due to lack of data.
Carcinogenicity	: Classification not possible due to lack of data.
Reproductive toxicity	: Classification not possible due to lack of data.
Specific target organ toxicity (Single ex	-
	: Classification not possible due to lack of data.
Specific target organ toxicity (Repeated	▲ /
	: Classification not possible due to lack of data.
Aspiration hazard	: Classification not possible due to lack of data.
12. Ecological Information	
Ecotoxicity	
Hazardous to the aquatic environmen	nt (acute)
	: Classification not possible due to lack of data.
Hazardous to the aquatic environmen	nt (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.

## 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

: Fire Defense Law under flammable objects.

15. Regulatory Information	
Fire Defense Law	: Article 9-4 (Standard for storage and handling of hazardous material with
	less than specified amount) Article 1-12 on regulations of hazardous
	materials, and Group 4 specific flammable materials (Rag and paper waste.
	If a total amount is 1,000 kg, follow Fire Defense Law. If a total amount is
	less than 1,000 kg, follow the regulations defined by municipal ordinance for
	storage and handling of the material).

## 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)