Key to the Symbols:

Recommendations are based on a 24-hour static exposure to the test fluid at room temperature.

- Recommended: No change in either water flow rate or bubble point will be observed.
- Limited resistance: Additional in-house testing is advised as swelling, discoloration or other minor changes may occur.
- Not recommended: Significant changes in water flow rate and/or bubble point can be expected.
- Data not available.

Membrane Filters

CHEMICAL		Polymer / Product							
ONEMICAE		MCE	CA	PCTE	PTFE	Sup- ported PTFE	Hydro- philic PTFE	Coated CA	
A	Glacial Acetic acid	••	**	**			•	••	
Acid	10% Acetic acid	*	×	×	•	•		×	
		•	•						
	12 kmol/m ³ Hydrochloric acid (37%, 12N)	*	*	•	•	•		*	
	6 kmol/m ³ Hydrocloric acid (19%, 6N)	•	*	•	•	•	-	*	
	12 kmol/m ³ Nitric acid (53%, 12N)	*	*	•	•	•		*	
	6 kmol/m ³ Nitric acid (26%, 6N)	•	*	•	•	•	•	*	
	18 kmol/m ³ Sulfuric acid (96%, 36N)	×	×	×	•		×	×	
	3 kmol/m³ Sulfuric acid (16%, 6N)		×	•	•	•	•	×	
	85% Phosphoric acid		×	×	•			×	
	5% Boric acid	•	•	•	•	•	•	•	
	50% Formic acid			•	•	•	•		
	35% Hydrofluoric acid	×	×	٠	•	٠	٠	×	
	60% Perchloric acid	•	×	×	•	•	•	×	
Alkalis	6 kmol/m ³ Sodium hydroxide (26%, 6N)	×	×	×	•	٠	٠	×	
	6 kmol/m ³ Potassium hydroxide (20%, 6N)	×	×	×	•	•	•	×	
	6 kmol/m ³ Aqueous ammonia (11%, 6N)	×	×	×	•	٠	٠	×	
Alcohol	Methyl alcohol	×	•	•	•	•	•	•	
	Ethyl alcohol	×	•	٠	•	•	٠	•	
	Isopropyl alcohol	V	•	•	•	•	•	•	
	Isobutyl alcohol	•	•	٠	•	•	•	•	
	Butyl alcohol		•	•	•	•	•	•	
	Glycerol	•	•	•	•	•	•	•	
	Amyl alcohol	V	•	•	•	•		•	
	Benzyl alcohol	•	×	×	•	•	•	×	
	Ethylene glycol	×	•	•	•	•	•	•	

To be continued next page

Membrane Filters (Continued)

CHEMICAL			Polymer / Product							
		MCE	CA	PCTE	PTFE	Sup- ported PTFE	Hydro- philic PTFE	Coated CA		
Ethere and		_	•	•	•	_	•	•		
Ethers	Ethyl ether	•	•	•	•		•	•		
	Isopropyl ether	•	•	•	•	•	•	•		
	Tetrahydrofuran	*	*	*	•	×	•	×		
	Dioxane	*	×	×	•	•	•	×		
	Petroleum ether	•	•							
Esters	Methyl acetate	*	×	×	•	•	•	×		
	Butyl acetate	*	×		•	•	•	×		
	Amyl acetate	×		٠	•	•	٠			
Ketones	Acetone	×	×	×	•	•	•	×		
	Methylethyl ketone	×	×	×	•	•	٠	×		
	Methyl isobutyl ketone	×	×	×	•	•	•	×		
	Cyclohexanone	×	×	×	•	•	•	×		
Hydrocarbons	Benzene	•	•	×	•	•	•	•		
	Toluene		•	*	•					
	Xylene		•	•	•	•	•	•		
	Hexane		•							
						-	-			
	Gasoline	•	•	•	•		•	•		
	Kerosene	•	•	•	•	•	•	•		
Halogenated	Chloroform	•	×	×	•			×		
hydrocarbons	Methylene chloride	×	×	×	•		•	×		
	Trichloroethylene	•	•	×	•	•	•	•		
	Tetrachloroethylene	•	•	٠	٠	•	٠	٠		
	Carbon tetrachloride	•	•	×	•		•	•		
Amines	Aniline	×	×	×	•	•	۲	×		
	Dimethyl formamide	×	×	×	•		•	×		
	Diethyl acetamide	×	×	×	•	•	•	×		
	Triethanolamine	×	•	×	•	•	•	•		
Miscellaneous	Methyl cellosolve	*	×	*	•		•	×		
mooonarroouo	Butyl cellosolve	×		×	•	•	•			
	Nitrogen	•	•	•	•	•	•	•		
	Hydrogen	•	•	•	•	•	•	•		
	Oxygen	•	•	•	•	•	•	•		
	30% Hydrogen peroxide	×	•	•	•	•	•	•		
	Saline solution	•	•	٠	•	•	•	•		
	Dimethylsulfoxide	×	×	×	•	•	•	×		
	Nitrobenzene	×	×	×	٠	٠	٠	×		
	Methanol (1): Chloroform (1)	•	×	×	•	•	•	×		
	Pyridine	×	×	×	•	•	٠	×		
	Acetonitrile	×	×	×	•	•		×		
	Phenol	•	×	×	•	•	•	×		
	Freon	•	•		•	•				
	37% Formaldehyde	•		•	•	•	•	•		
	Silicone oil		×	•	•	•		×		
	n-Hexane (95): Ethyl acetate (5)	*	•	•	•	•	•	•		
	Nitric acid (70): Distilled water (30)	×	×	×	•	•	•	×		
	Petroleum oil	•	•	•	•	•	•	•		

Disposable Syringe Filter Units

	AS	CS	CP	HP	JP
	Mixed Cellulose Esters with acrylic housing	Cellulose Acetate with acrylic housing	Cellulose Acetate with PP housing	Hydrophilic PTFE with PP housing	Hydrophobic PTFE with PP housing
3 kmol/m ³ Hydrochloric acid (10%, 3N)	•	▼	▼	•	•
	×	×	×	•	•
	•	•	•	•	•
4 kmol/m ³ Sulfuric acid (20%, 8N)	×	×	×	•	•
1 kmol/m ³ Nitric acid (5%, 1N)	•	•	▼	•	•
	×	×	×	•	•
20% Acetic acid	•	•	•	•	•
Glacial acetic acid	×	×	×	•	•
10% Hydrofluoric acid	×	×	×	•	•
	×	×	×	•	•
	V	V	V	•	•
	•	•	•	•	•
	×	×	×	•	•
			-		
		~			
	•	•	-	-	
			-	-	-
					_
					•
					•
					•
		×	•	•	•
	*	×	•	•	•
Gasoline	▼	V	•	•	•
	1 kmol/m³ Nitric acid (5%, 1N) 5 kmol/m³ Nitric acid (20%, 5N) 20% Acetic acid Glacial acetic acid 10% Hydrofluoric acid 35% Hydrofluoric acid 10% Chromic acid 10% Phosphoric acid 2.5 kmol/m³ Sodium hydroxide (10%, 2.5N) 2 kmol/m³ Potassium hydroxide (10%, 2.5N) 2 kmol/m³ Aqueous ammonia (28%, 8N) Methyl alcohol Ethyl alcohol n-Propyl alcohol Isopropyl alcohol Benzyl alcohol Benzyl alcohol Benzyl alcohol Benzyl alcohol Benzyl alcohol Butyl acohol Butyl acohol Butyl acohol Benzyl alcohol Butyl acohol Butyl acohol Butyl acohol Butyl acetate Butyl acetate Butyl acetate Butyl acetate Acetone Methyl isobutyl ketone (MEK) Methyl isobutyl ketone (MIBK) Cyclohexanone Benzene Toluene Xylene n-Hexane	Cellulose Esters with acrylic housing3 kmol/m³ Hydrochloric acid (10%, 3N)9 kmol/m³ Hydrochloric acid (30%, 9N)1 kmol/m³ Sulfuric acid (5%, 2N)4 kmol/m³ Nitric acid (5%, 1N)5 kmol/m³ Nitric acid (20%, 8N)20% Acetic acidGlacial acetic acid0 % Hydrofluoric acid35% Hydrofluoric acid35% Hydrofluoric acid35% Hydrofluoric acid35% Hydrofluoric acid10% Chromic acid10% Chromic acid2.5 kmol/m³ Sodium hydroxide (10%, 2.5N)2 kmol/m³ Aqueous ammonia (28%, 8N)8 kmol/m³ Aqueous ammonia (28%, 8N)Methyl alcoholn-Propyl alcoholn-Propyl alcoholm-Propyl alcoholSethyl encholKing el glycolKing el glycolEthyl alcoholSethyl el derBenzyl alcoholSethyl alcoholSethyl alcoholStropopyl el derStropopyl el derKanyl alcoholSethyl alcoholSethyl alcoholSethyl alcoholSethyl alcoholSethyl alcoholSethyl alcoholSethyl alcoholSethyl alcoholSethyl el derSethyl el derSethyl el derSethyl el derSethyl el derSethyl el derSethyl acetateSethyl acetateSethyl acetateSethyl acetateSethyl acetateSethyl acetateSethyl acetateAcetoneMethyl acetateAcet	Cellulose Esters with acrylic housingAcetate with acrylic housing3 kmol/m³ Hydrochloric acid (30%, 9N)••9 kmol/m³ Sulfuric acid (30%, 9N)••1 kmol/m³ Sulfuric acid (20%, 8N)••1 kmol/m³ Nitric acid (20%, 5N)••5 kmol/m³ Nitric acid (20%, 5N)••20% Acetic acid••Glacial acetic acid••10% Hydrofluoric acid**10% Hydrofluoric acid••10% Phosphoric acid••2.5 kmol/m³ Sodium hydroxide (10%, 2.5N)**2 kmol/m³ Sodium hydroxide (10%, 2.5N)**2 kmol/m³ Aqueous ammonia (28%, 8N)*•8 kmol/m³ Aqueous ammonia (28%, 8N)••8 kmol/m³ Aqueous ammonia (28%, 8N)*•9 lacohol••n-Porpyl alcohol••n-Butyl alcohol••Isopropyl alcohol••ethyl alcohol•*Benzyl alcohol•*Benzyl alcohol•*Ethylene glycol**Ethyl acetate**Isopropyl ether**Tetrahydrofuran (THF)**Dioxane**Methyl acetate**Anyl acetate**Anyl acetate**Acetone**Methyl ethyl ketone (MEK)**Methyl isobutyl ketone (Cellulose Esters with acrylic housingAcetate with acrylic housing3 kmol/m³ Hydrochloric acid (10%, 3N)••9 kmol/m³ Hydrochloric acid (30%, 9N)••1 kmol/m³ Sulfuric acid (5%, 2N)••4 kmol/m³ Sulfuric acid (20%, 8N)••5 kmol/m³ Nitric acid (20%, 5N)••5 kmol/m³ Nitric acid (20%, 5N)••5 kmol/m³ Nitric acid (20%, 5N)••6 Glacial acetic acid••6 Glacial acetic acid••10% Chromic acid••10% Chromic acid••2.5 kmol/m³ Noticle (10%, 2.5N)••2 kmol/m³ Aqueous ammonia (28%, 8N)••8 kmol/m³ Aqueous ammonia (28%, 8N)••9 kmol/ma Aqueous ammonia (28%, 8N)••9 kmol/m³ Aqueous ammonia (28%, 8N)••9 kmol/m³ Aqueous ammonia (28%, 8N)••9 kmol/m³ Aqueous ammonia (28%, 8N)••9 kmol/ma Aqueous ammonia (28%, 8N	Cellulose Esters with acrylic housing Acetate with Phousing Y TFE With Phousing 3 kmol/m³ Hydrochloric acid (10%, 3N) V V • 1 kmol/m³ Sulfuric acid (20%, 9N) V • • 1 kmol/m³ Sulfuric acid (20%, 9N) X X × 1 kmol/m³ Sulfuric acid (20%, 5N) X X • 5 kmol/m³ Nitric acid (20%, 5N) X X × 20% Acetic acid • • • 10% Hydrofluoric acid X X × 10% Hydrofluoric acid X X • 10% Hydrofluoric acid X X • 10% Chronic acid X X • 10% Phosphoric acid • • • 2.5 kmol/m³ Pdasuum hydroxide (10%, 2.5N) X X • 2 kmol/m³ Pduseus ammonia (28%, 8N) X × • 8 kmol/m³ Aqueous ammonia (28%, 8N) X • • 8 kmol/m³ Aqueous ammonia (28%, 8N) X × • 9 Hydrochol • • • • 10% Chronic acid × • • 10% Chronic acid × × • 2 kmol/m³ Aqueous ammonia (28%, 8N) × ×

Disposable Syringe Filter Units (Continued)

CHEMICAL		AS	CS	СР	HP	JP
		Mixed Cellulose Esters with acrylic housing	Cellulose Acetate with acrylic housing	Cellulose Acetate with PP housing	Hydrophilic PTFE with PP housing	Hydrophobic PTFE with PP housing
Halogenated	Chloroform	×	×	×	•	•
hydrocarbons	Methylene chloride	*	*	×	•	•
•	Trichloroethylene	*	×	▼	▼	▼
	Carbon tetrachloride	×	×	•	•	•
	Trichloroethane	×	×	×	▼	▼
	Perchloroethylene	×	×	×	•	•
Amines	Freon (TMC)	×	×	▼	▼	▼
	Aniline	×	×	×	▼	•
	Dimethyl formamide	×	×	×	▼	▼
	Diethylacetamide	*	×	×	▼	▼
	Triethanolamine	×	•	•	•	•
Misc.	Ethyl acetate cellosolve	×	×	×	▼	▼
	Acetonitrile	*	×	×	▼	▼
	Pyridine	*	×	×	▼	▼
	Sodium Hypochloride	*	×	×	•	•
	35% Formaldehyde	×	▼	▼	•	٠
	Iron (II) chloride	•	•	•	•	•
	Copper sulfate	٠	•	٠	•	٠
	Mineral oil	▼	•	▼	▼	▼
	Salt water	•	•	٠	٠	•
	10% Hydrogen peroxide	*	▼	•	•	•
	Nitrobenzene	*	×	×	▼	▼
	Phenol	*	×	×	•	•
	Silicone oil	*	×	×	•	•
	Petroleum oil	V	•	•	•	•
	Acetonitrile (70): water (30)	*	×	×	•	•

Capsule Filters

CHEMICAL		ccs	CCF/CCFH	ССР	CCG
Acids	5% Acetic acid	•	•	•	•
Adido	20% Acedic acid				
	10% Chromic acid	+	•	•	×
	3 kmol/m ³ Hydrochloric acid (10%, 3N)	•			
	11 kmol/m ³ Hydrochloric acid (35%, 11N)				•
	10% Hydrofluoric acid	+			×
	1 kmol/m ³ Nitric acid (5%, 1N)	+			•
	4 kmol/m ³ Nitric acid (20% , $4N$)	•		-	×
	10% Phosphoric acid	×			
	1 kmol/m ³ Sulfuric acid (5%, 2N)	•			
Allealia	4 kmol/m ³ Sulfuric acid (20%, 8N)				
Alkalis	2.5 kmol/m ³ Sodium hydroxide (10%, 3N)	•	•	•	
	2 kmol/m ³ Potassium hydroxide (10%, 2N)	•	•	•	_
	5 kmol/m ³ Aqueous ammonia (10%. 5N)	•	•	•	
	15 kmol/m ³ Aqueous ammonia (28%. 15N)	•	•	•	
Alcohols	Methyl alcohol	•	•	•	
	Ethyl alcohol	•		•	
	n-Propyl alcohol	•	•	•	•
	n-Butyl alcohol	•	•	•	
	Ethylene glycol	•	•	•	•
Ethers	Ethyl ether	▼		▼	×
	Dioxane	▼	▼		*
	Tetrahydrofuran (THF)	*	▼	$\mathbf{\nabla}$	*
Esters	Amyl acetate	+	▼	▼	+
	Methyl acetate	+	▼	V	•
	Ethyl acetate	×	▼	▼	•
	Butyl acetate	+	▼	▼	▼
Ketones	Acetone	×	▼	▼	×
	Methyl ethyl ketone (MEK)	×	▼	$\mathbf{\nabla}$	×
	Methyl isobutyl ketone (MIBK)	×	•	•	×
Hydro-	n-Hexane	▼	▼	▼	▼
carbons	Cyclohexane	•	•	•	•
	Benzene	V	▼	▼	▼
	Toluene	×	•	•	×
	Xylene	+	▼	▼	▼
	Chloroform	×	▼	•	×
Halogenated	Carbon tetrachloride	+	▼	•	•
hydrocarbons	Freon (TMC)	×	•	• •	×
,	Methylene chloride	×	V	•	×
	Trichloroethylene	+	▼ ▼	• •	*
	Trichloroethane	+	V	•	.
Amines	Dimethyl formamide	×	▼ ▼	• •	×
Aldehydes	Acetaldehyde	+	+	+	+
nuenyues			•	•	-
	35% Formaldehyde	•		-	-
Misc.	Acetic cellosolve	+		-	•
	Acetonitrile	+		-	*
	Pyridine	+	•	•	×
	Nitrobenzene	+	+	+	+
	6% Sodium hypochlorite	+			
	Ferrous chloride	•	•	•	•
	Copper Sulfate	•	•	•	•
	Mineral oil	•		•	
	Salt water	•	•	•	•
	10% Hydrogen peroxide	٠	•	•	▼