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						
		MCE	CA	PCTE	PTFE	Sup-ported PTFE	Hydro-phillic PTFE	Coated CA
Acid	Glacial Acetic acid	✖	✖	✖	●	●	●	✖
	10% Acetic acid	●	●	●	●	●	●	●
	12 kmol/m³ Hydrochloric acid (37%, 12N)	✖	✖	●	●	●	●	✖
	6 kmol/m³ Hydrocloric acid (19%, 6N)	▼	✖	●	●	●	●	✖
	12 kmol/m³ Nitric acid (53%, 12N)	✖	✖	●	●	●	▼	✖
	6 kmol/m³ Nitric acid (26%, 6N)	▼	✖	●	●	●	●	✖
	18 kmol/m³ Sulfuric acid (96%, 36N)	✖	✖	✖	●	●	✖	✖
	3 kmol/m³ Sulfuric acid (16%, 6N)	▼	✖	●	●	●	●	✖
	85% Phosphoric acid	●	✖	✖	●	●	●	✖
	5% Boric acid	●	●	●	●	●	●	●
	50% Formic acid	▼	▼	●	●	●	●	▼
	35% Hydrofluoric acid	✖	✖	●	●	●	●	✖
	60% Perchloric acid	●	✖	✖	●	●	●	✖
Alkalis	6 kmol/m³ Sodium hydroxide (26%, 6N)	✖	✖	✖	●	●	●	✖
	6 kmol/m³ Potassium hydroxide (20%, 6N)	✖	✖	✖	●	●	●	✖
	6 kmol/m³ Aqueous ammonia (11%, 6N)	✖	✖	✖	●	●	●	✖
Alcohol	Methyl alcohol	✖	●	●	●	●	●	●
	Ethyl alcohol	✖	●	●	●	●	●	●
	Isopropyl alcohol	▼	●	●	●	●	●	●
	Isobutyl alcohol	▼	●	●	●	●	●	●
	Butyl alcohol	●	●	●	●	●	●	●
	Glycerol	●	●	●	●	●	●	●
	Amyl alcohol	▼	●	●	●	●	●	●
	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
Ethers	Ethyl ether	▼	●	●	●	▼	●	●
	Isopropyl ether	●	●	●	●	●	●	●
	Tetrahydrofuran	✖	✖	✖	●	✖	●	✖
	Dioxane	✖	✖	✖	●	●	●	✖
	Petroleum ether	●	●	●	●	●	●	●
Esters	Methyl acetate	✖	✖	✖	●	●	●	✖
	Butyl acetate	✖	✖	●	●	●	●	✖
	Amyl acetate	✖	▼	●	●	●	●	▼
Ketones	Acetone	✖	✖	✖	●	●	●	✖
	Methylethyl ketone	✖	✖	✖	●	●	●	✖
	Methyl isobutyl ketone	✖	✖	✖	●	●	●	✖
	Cyclohexanone	✖	✖	✖	●	●	●	✖
Hydrocarbons	Benzene	●	●	✖	●	●	●	●
	Toluene	●	●	✖	●	●	●	●
	Xylene	●	●	●	●	●	●	●
	Hexane	●	●	●	●	●	●	●
	Gasoline	●	●	●	●	▼	●	●
	Kerosene	●	●	●	●	●	●	●
Halogenated	Chloroform	●	✖	✖	●	▼	●	✖
hydrocarbons	Methylene chloride	✖	✖	✖	●	▼	●	✖
	Trichloroethylene	●	●	✖	●	●	●	●
	Tetrachloroethylene	●	●	●	●	●	●	●
	Carbon tetrachloride	●	●	✖	●	▼	●	●
Amines	Aniline	✖	✖	✖	●	●	●	✖
	Dimethyl formamide	✖	✖	✖	●	▼	●	✖
	Diethyl acetamide	✖	✖	✖	●	●	●	✖
	Triethanolamine	✖	●	✖	●	●	●	●
Miscellaneous	Methyl cellosolve	✖	✖	✖	●	●	●	✖
	Butyl cellosolve	✖	●	✖	●	●	●	●
	Nitrogen	●	●	●	●	●	●	●
	Hydrogen	●	●	●	●	●	●	●
	Oxygen	●	●	●	●	●	●	●
	30% Hydrogen peroxide	✖	●	●	●	●	●	●
	Saline solution	●	●	●	●	●	●	●
	Dimethylsulfoxide	✖	✖	✖	●	●	●	✖
	Nitrobenzene	✖	✖	✖	●	●	●	✖
	Methanol (1): Chloroform (1)	▼	✖	✖	●	●	●	✖
	Pyridine	✖	✖	✖	●	●	●	✖
	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

CHEMICAL		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
Acids	3 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)	✖	✖	✖	●	●
	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	●	●	●	●	●
Alkalis	2.5 kmol/m³ Sodium hydroxide (10%, 2.5N)	✖	✖	✖	●	●
	2 kmol/m³ Potassium hydroxide (10%, 2N)	✖	✖	✖	●	●
	8 kmol/m³ Aqueous ammonia (28%, 8N)	✖	●	▼	●	●
Alcohols	Methyl alcohol	✖	✖	●	●	●
	Ethyl alcohol	✖	▼	●	●	●
	n-Propyl alcohol	▼	●	●	●	●
	Isopropyl alcohol	▼	●	●	●	●
	n-Butyl alcohol	▼	●	●	●	●
	Amyl alcohol	▼	●	●	●	●
	Benzyl alcohol	▼	✖	✖	●	●
	Ethylene glycol	✖	✖	●	●	●
	Glycerol	●	●	●	●	●
Ethers	Ethyl ether	✖	✖	▼	▼	▼
	Isopropyl ether	✖	✖	●	●	●
	Tetrahydrofuran (THF)	✖	✖	✖	▼	▼
	Dioxane	✖	✖	✖	▼	▼
Esters	Methyl acetate	✖	✖	✖	▼	▼
	Ethyl acetate	✖	✖	✖	▼	▼
	Butyl acetate	✖	✖	✖	▼	▼
	Amyl acetate	✖	✖	▼	▼	▼
Ketones	Acetone	✖	✖	✖	●	●
	Methyl ethyl ketone (MEK)	✖	✖	✖	▼	▼
	Methyl isobutyl ketone (MIBK)	✖	✖	✖	▼	▼
	Cyclohexanone	✖	✖	✖	▼	▼
Hydro-carbons	Benzene	✖	✖	▼	▼	▼
	Toluene	✖	✖	▼	▼	▼
	Xylene	✖	✖	▼	▼	▼
	n-Hexane	✖	✖	▼	▼	▼
	Gasoline	▼	▼	●	●	●
	Kerosene	●	●	▼	▼	▼

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Disposable Syringe Filter Units (Continued)

CHEMICAL		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
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	✖	▼	▼	●	●
	Iron (II) chloride	●	●	●	●	●
	Copper sulfate	●	●	●	●	●
	Mineral oil	▼	●	▼	▼	▼
	Salt water	●	●	●	●	●
	10% Hydrogen peroxide	✖	▼	●	●	●
	Nitrobenzene	✖	✖	✖	▼	▼
	Phenol	✖	✖	✖	●	●
	Silicone oil	✖	✖	✖	●	●
	Petroleum oil	▼	▼	●	●	●
	Acetonitrile (70): water (30)	✖	✖	✖	●	●

Capsule Filters

CHEMICAL		CCS	CCF/CCFH	CCP	CCG
Acids	5% Acetic acid	●	●	●	●
	20% Acedic acid	●	●	●	▼
	10% Chromic acid	✦	▼	▼	✖
	3 kmol/m³ Hydrochloric acid (10%, 3N)	●	●	●	●
	11 kmol/m³ Hydrochloric acid (35%, 11N)	●	●	●	▼
	10% Hydrofluoric acid	✦	●	●	✖
	1 kmol/m³ Nitric acid (5%, 1N)	✦	●	●	▼
	4 kmol/m³ Nitric acid (20%, 4N)	✦	▼	▼	✖
	10% Phosphoric acid	✦	●	●	●
	1 kmol/m³ Sulfuric acid (5%, 2N)	●	●	●	●
	4 kmol/m³ Sulfuric acid (20%, 8N)	●	●	●	▼
Alkalis	2.5 kmol/m³ Sodium hydroxide (10%, 3N)	●	●	●	▼
	2 kmol/m³ Potassium hydroxide (10%, 2N)	●	●	●	▼
	5 kmol/m³ Aqueous ammonia (10%. 5N)	●	●	●	▼
	15 kmol/m³ Aqueous ammonia (28%. 15N)	●	●	●	▼
Alcohols	Methyl alcohol	●	●	●	▼
	Ethyl alcohol	●	●	●	▼
	n-Propyl alcohol	●	●	●	▼
	n-Butyl alcohol	●	●	●	▼
	Ethylene glycol	●	●	●	●
Ethers	Ethyl ether	▼	▼	▼	✖
	Dioxane	▼	▼	▼	✖
	Tetrahydrofuran (THF)	✖	▼	▼	✖
Esters	Amyl acetate	✦	▼	▼	✦
	Methyl acetate	✦	▼	▼	▼
	Ethyl acetate	✖	▼	▼	▼
	Butyl acetate	✦	▼	▼	▼
Ketones	Acetone	✖	▼	▼	✖
	Methyl ethyl ketone (MEK)	✖	▼	▼	✖
	Methyl isobutyl ketone (MIBK)	✖	▼	▼	✖
Hydro-	n-Hexane	▼	▼	▼	▼
carbons	Cyclohexane	▼	▼	▼	▼
	Benzene	▼	▼	▼	▼
	Toluene	✖	▼	▼	✖
	Xylene	✦	▼	▼	▼
	Chloroform	✖	▼	▼	✖
Halogenated	Carbon tetrachloride	✦	▼	▼	▼
hydrocarbons	Freon (TMC)	✖	▼	▼	✖
	Methylene chloride	✖	▼	▼	✖
	Trichloroethylene	✦	▼	▼	✖
	Trichloroethane	✦	▼	▼	▼
Amines	Dimethyl formamide	✖	▼	▼	✖
Aldehydes	Acetaldehyde	✦	✦	✦	✦
	35% Formaldehyde	●	●	●	●
Misc.	Acetic cellosolve	✦	▼	▼	▼
	Acetonitrile	✦	▼	▼	✦
	Pyridine	✦	▼	▼	✖
	Nitrobenzene	✦	✦	✦	✦
	6% Sodium hypochlorite	✦	●	●	●
	Ferrous chloride	●	●	●	●
	Copper Sulfate	●	●	●	●
	Mineral oil	▼	▼	▼	▼
	Salt water	●	●	●	●
	10% Hydrogen peroxide	●	●	●	▼