

### Estimated Percent Rejection of Various Solutes by Membranes

In order to assist customers in estimating the rejection of membranes, tests have been performed with a variety of solute compounds. The results of these tests are indicated as a % rejection for each compound listed in the tables below. Actual system performance may vary from the listed data, particularly with changes in feedwater concentration, pH, and temperature. Pilot trials should be performed to determine actual rejection in a specific application.

Solute	MW	Rejection, %	Solute	MW	Rejection, %
1,1,1-Trichloroethane	133	98	Furfural	96	35
1,2 Dibromoethane	173	15	Glucose	180	98-99
1,2 Dichloroethane	99	37	Glycine	188	78
1,2,3-Trichlorobenzene	181	>57	Heptaldehyde	114	100
1,2,4-Trichlorobenzene	181	96	Humic Acid		98
1,2,4-Trimethylbenzene	120	57	Hydrochloric Acid	36	28
1,2-Dichlorobenzene	147	70-92	Isophorone	138	96
1,3-Dichlorobenzene	147	66-69	Isopropanol	60	90
1,4-Dichlorobenzene	147	61	Lactic Acid (ph2)	90	94
1-Chlorododecane	204	87	Lactic Acid (ph5)	42	99
1-Methylnaphthalene	142	67	Magnesium Chloride	120	98
2,2',5,5' Tetrachlorobiphenyl	290	46	Magnesium Sulfate	120	99
2,4,6-Trichlorophenol	197	100	Manganese (II) Sulfate	151	97
2,4-Dichlorophenol	163	93	Methanol	32	25
2,6 Dimethylphenol	122	92	Methyl Ethyl Ketone	72	73
2,6-Di-Tert-Butyl-4-Methylphenol	220	96	Methyl Isobutyl Keytone	100	98
3,8 Dimethylphenol	122	92	Naphthalene	128	80
3-Hydroxy-Capric Acid	188	>98	Nickel Chloride	130	96-99
3-Pentanone	86	74	Nickel Sulfate	155	97-99
4-Ethylphenol	122	84	o-Cresol	108	84
4-Isopropylphenol	136	84	o-Xylene	106	67
5-Chlorouracil	146	88	p & m Xylene	106	38
Acetic Acid	60	45	Pentachlorophenol	266	86
Acetone	58	70	Phenol - 80%	94	65
Aluminum Nitrate	213	86	Phosphoric Acid	96	94
Aluminum Sulfate	342	89	Quinoline	129	97
Aniline	93	64-75	Silica	60	98
Anthraquinone	208	93	Sodium Acetate (1%)	82	88
Benzene	78	7819	Sodium Bicarbonate	84	98
Benzoic Acid	122	92	Sodium Bromide	103	96
Benzothiazole	133	79	Sodium Chloride	58	99
Biphenyl	154	91	Sodium Cyanide	49	95
Bis (2-Ethylhexyl) Phthalate	390	94	Sodium Di-H Phosphate	120	98
Boric Acid	230		Sodium Fluoride	42	98
Bromodichloromethane	163	79	Sodium Hydrogen Sulfate	120	76
Bromoform	94	>67	Sodium Iodide	150	97
Cadmium Sulfate	208	97	Sodium Mono-H Phosphate	142	98
Caffeine	174	99	Sodium Nitrate	85	93-98
Calcium Chloride	111	99	Sodium Orthophosphate	164	99
Calcium Nitrate	164	95	Stearic Acid	204	71
Carbon Tetrachloride	153	98	Strontium Chloride	158	96
Cesium Chloride	168	97	Succinic Acid	118	35
Chlorobenzene	112	0-50	Sucrobe	342	99
Chlorofoam	50	71-90	Sulfuric Acid	98	84
cis-1,2 Dichloroethylene	97	20	Tetrachloroethylene	165	68-80
Clofibric Acid	214	>99	Tin (II) Sulfate	215	85
Copper Sulfate	160	99	Tributyl Phosphate	266	49
Cyclohexanone	98	95	Trichloroethylene	131	30-43
Dibromochloromethane	208	79	Trimesic Acid	210	96
e-Caprolactum	113	85	Urea	60	70
Ethanol	46	38-70	Zinc Chloride	136	93
Ethyl Benzene	106	71	Zinc Sulfate	161	98
Formaldehyde	30	35			