

# CHEMICAL RESISTANCE GUIDE

## EXPLANATION OF RATINGS:

- A - Excellent**
- B - Good**
- C - Fair**
- P - Poor**

This guide has been prepared to aid in selecting the proper material for various media. This information is intended only as a general guide and should not be taken as a guarantee. To insure reliable performance, conduct an actual experiment using suggested elastomer, planned media, and actual service temperature and pressure conditions.

	BUNA-N	EPDM	HYPALON	NEOPRENE	VITON	BRONZE	DUCTILE IRON	STAINLESS STEEL
CHEMICALS								
Acetone	P	A	P	P	P	A	A	A
Air (Dry)	A	A	A	A	A	A	A	A
Alcohol, Butyl	B	B	B	B	A	B	A	A
Alcohol, Ethyl	C	A	B	B	-	B	A	B
Alcohol, Methyl	B	A	A	A	A	B	A	A
Asphalt	C	P	-	-	B	A	A	A
Aluminum Acetate	C	B	-	-	C	P	P	A
Ammonia Gas	B	A	P	B	P	A	-	A
Ammonia Liquid	C	A	P	B	P	P	-	A
Aniline Dies	P	B	C	C	B	P	B	A
Barium Nitrate	A	A	B	A	A	P	A	A
Beer	A	A	A	B	A	B	P	-
Beet Sugar Liquors	-	A	A	B	C	A	B	A
Benzene (Benzol)	P	P	P	P	B	B	A	B
Brines, Saturated	B	B	B	B	B	B	P	B
Butane	A	P	C	A	A	C	A	A
Calcium Chloride	C	A	A	A	A	B	A	B
Carbon Tetrachloride	P	P	-	-	C	P	C	A
Chlorinate (10 ppm)	C	B	-	-	B	P	-	B
Citric Acid	B	B	A	A	-	P	P	A
Diesel Oil Fuels	A	P	C	C	A	A	A	A
Dioxane	P	P	B	B	P	A	A	A
Ethylene Glycol	A	A	A	A	A	B	A	B
Freon	B	A	A	A	P	B	B	A
Fructose	A	A	-	-	A	-	A	P
Fuel Oil	A	P	C	C	A	B	B	A
Gas, Natural	B	P	A	A	A	B	A	A
Gas, Sour	C	P	-	-	B	B	B	B
Gaoline, Unleaded	P	P	B	B	A	B	A	A
Glucose	A	B	A	A	-	A	A	-
Grease	A	P	-	-	A	P	A	A
Ink, Newsprint	B	A	-	B	B	P	A	A
JP-4 Fuel	A	P	P	P	A	A	A	A
Kerosene	A	P	C	B	A	A	A	A
Ketones	P	A	P	P	P	A	A	A
Latex	A	C	C	C	B	-	A	A
Linseed Oil	A	C	B	B	A	A	A	A

	BUNA-N	EPDM	HYPALON	NEOPRENE	VITON	BRONZE	DUCTILE IRON	STAINLESS STEEL
CHEMICALS								
LPG	A	P	P	C	B	A	A	B
Mineral Oils	A	P	B	B	A	A	A	A
Minewater	A	B	C	C	A	C	P	-
Molasses	A	P	A	A	B	A	A	A
Naptha	B	P	P	P	B	B	A	P
Nitric Acid, 10%	P	B	A	B	A	P	P	B
Nitric Acid, 100%	P	P	-	-	C	P	P	B
Nitrogen	-	A	-	-	-	A	A	A
Oleic Acid	B	C	B	B	C	B	C	B
Oxygen	C	A	A	A	A	A	A	A
Paints, Solvents	P	A	-	-	-	A	A	A
Paraffin	A	P	A	A	A	A	B	A
Phenol Gas	P	C	C	C	B	P	P	A
Tar	C	P	-	C	B	A	A	A
Salt Water	A	A	A	B	A	C	P	B
Sewage	A	B	A	A	A	C	B	B
Soap Solutions	A	A	A	A	A	B	B	A
Sugar	A	A	B	B	A	P	B	A
Sulfate Liquor	P	C	B	B	B	P	-	A
Sulfite Liquor	C	A	B	B	B	P	B	B
Sulfuric Acid 0-77%	C	B	B	P	B	P	P	B
Sulfuric Acid 100%	P	P	B	P	P	P	P	P
Tannic Acid (Tannin)	B	A	A	A	B	B	B	B
Toluol (Tolurene)	C	P	P	P	B	A	A	A
Trichlorethylene	-	P	P	P	B	A	-	A
Turpentine	A	P	P	P	A	A	B	A
Varnish	B	P	-	-	B	B	-	-
Vinegar	P	A	A	B	A	P	P	A
Water and Lime	A	A	B	B	A	P	P	A

## TEMPERATURE LIMITATIONS-

BUNA-N	+10°F to 180°F
EPDM	-30°F to 250°F
HYPALON®	0°F to 180°F
NEOPRENE-FDA	0°F to 180°F
VITON®	-20°F to 300°F

The information presented on this sheet is correct at the time of publication. Milwaukee Valve reserves the right to change design, and/or material specifications without notice. For the Installation, Operation and Maintenance Manual (IOM) see the Technical/Service Information section on our website. For the most current information access [www.milwaukeevalve.com](http://www.milwaukeevalve.com)

