

# CHEMICAL RESISTANCE CHART

### LIABILITY DISCLAIMER

Important Note : The following complimentary list can be used only as a limited guide to aid in your selection of pump and seal types. We make no guarantee as to its correctness, accuracy or completeness. Also, field results can often differ from laboratory results due to a variety of contaminants and variations. The best compatibility information is obtained by subjecting test samples to actual operating conditions. The choice of product or products and their intended area of method of use is the sole responsibility of the user.

#### SYMBOL DEFINITIONS:

**A** = GOOD CHEMICAL RESISTANCE

**C** = POOR CHEMICAL RESISTANCE

**B** = QUESTIONABLE (Check with manufacturer)

**D** = RESULTS UNDETERMINED

**N/R** = NOT RECOMMENDED

NORYL	POLYPROPYLENE	STAINLESS STEEL	BUNA-N	VITON	EDPM
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#### CHEMICAL

ACETIC ACID 95-100%  
 ACETIC ACID (glacial 70 ° F)  
 ACETIC ANHYDRIDE (100% boiling)  
 ACETONE 100%  
 ALCOHOL, BUTYL  
 ALCOHOL, ETHYL  
 ALCOHOL 2-AMINOETHANOL  
 ALUMINUM CHLORIDE (10% ambient/boiling)  
 ALUMINUM FLUORIDE

A	A	AB	C	C	A
A	A	B	C	C	A
C	C	AC	C	C	A
C	A	A	C	C	A
A	A	A	A	A	A
A	A	B	A	A	A
A	A	A	-	-	-
A	A	C	A	A	A
A	A	C	A	A	A



## CHEMICAL

CARBON BISULFIDE  
 CARBON TETRACHLORIDE (wet)  
 CARBONIC ACID (saturated)  
 CAUSTIC POTASH  
 CAUSTIC SODA  
 CHLORIC ACID  
 CHLORINATED WATER  
 CHLORINE MOIST  
 CHLORO BENZENE (dry)  
 CHLOROFORM  
 CHLOROSULFONIC ACID  
 CHROMIC ACID (dilute)  
 CHROMIC ACID (conc.)  
 CITRIC ACID (hot)  
 CITRIC ACID (dilute 15%)  
 COPPER CYANIDE (saturated)  
 COPPER FLUORIDE  
 COPPER NITRATE  
 COPPER SULFATE  
 COTTONSEED OIL  
 CRUDE OIL  
 CUPRIC CHLORIDE 5%  
 CYCLOHEXANE  
 CYCLOHEXANOL  
 DETERGENTS (general)  
 DIBUTYLPHTHALATE  
 DICHLORODIFLUORO METHANE (Freon 12)  
 DICHLOROETHYLENE  
 DIESEL FUEL  
 DIETHANOLAMINE  
 DIETHYLENE GLYCOL  
 DIMETHYL FORMAMIDE  
 DIMETHYL SULFOXIDE  
 DIOCTYL PHTHALATE  
 ETHANOLAMINE  
 ETHYL ACETATE  
 ETHYL CHLORIDE (wet)  
 ETHYLENE DICHLORIDE  
 ETHYLENE GLYCOL  
 ETHYLENE OXIDE  
 FATTY ACIDS  
 FERRIC CHLORIDE (concentrated)  
 FERRIC CHLORIDE 1%  
 FERRIC NITRATE 5%

	NORYL	POLYPROPYLENE	STAINLESS STEEL	BUNA-N	VITON	EDPM
A	C	A	B	A	N/R	
C	B	B	C	A	N/R	
A	A	A	A	A	A	
A	A	B	A	C	A	
A	A	B	N/R	B	A	
C	-	C	-	-	-	
C	AC	B	C	N/R	N/R	
B	C	C	C	B	B	
C	B	A	C	A	N/R	
C	B	B	C	A	N/R	
C	C	C	C	C	C	
A	A	B	N/R	A	-	
C	B	C	N/R	A	N/R	
A	A	B	A	A	A	
A	A	B	A	A	-	
A	A	A	A	A	A	
A	A	-	-	A	A	
A	A	A	A	A	A	
A	A	A	A	A	A	
A	A	A	A	A	AC	
C	A	A	A	A	N/R	
A	A	C	A	A	A	
C	B	A	A	A	N/R	
A	B	A	A	A	C	
A	A	A	A	A	A	
A	A	A	N/R	BC	A	
A	A	A	A	A	-	
C	A	-	N/R	A	C	
C	A	A	A	A	N/R	
A	-	A	B	N/R	A	
A	A	A	A	A	A	
C	A	A	A	A	A	
A	A	-	-	N/R	-	
A	C	A	C	B	A	
A	A	A	A	C	A	
C	A	A	C	C	A	
C	C	AC	A	A	A	
C	BC	A	C	A	C	
AC	A	A	A	A	A	
A	C	B	C	C	B	
A	A	B	A	A	C	
A	A	C	A	A	A	
A	A	BC	A	A	A	
A	A	A	A	A	A	

### CHEMICAL

FERRIC SULFATE 5%  
 FERROUS CHLORIDE  
 FERROUS SULFATE 10%  
 FLUOBORIC ACID  
 FLUOSILIC ACID  
 FORMALDEHYDE 37%  
 FORMIC ACID  
 FREON (wet)  
 FUEL OILS  
 FURFURAL  
 GASOLINE, LEADED  
 GASOLINE, UNLEADED  
 GELATIN  
 GLUCOSE  
 GLYCERINE  
 GLYCOL  
 HEPTANE  
 HEXANE  
 HYDROBROMIC ACID 37%  
 HYDROCHLORIC ACID (more than 20%)  
 HYDROCHLORIC ACID 1-20%  
 HYDROCHLORIC ACID 1%  
 HYDROCYANIC ACID  
 HYDROFLUORIC ACID  
 HYDROFLUOROSILIC ACID  
 HYDROGEN PEROXIDE  
 HYDROGEN SULFIDE (moist)  
 ISOPROPYL ALCOHOL  
 JET FUEL  
 KEROSENE  
 LACTIC ACID  
 LACQUERS & LACQUER SOLVENTS  
 LPG PROPANE  
 LEAD ACETATE  
 LINSEED OIL  
 LYE  
 MAGNESIUM CARBONATE  
 MAGNESIUM CHLORIDE  
 MAGNESIUM HYDROXIDE  
 MAGNESIUM NITRATE  
 MAGNESIUM SULFATE  
 MALEIC ACID  
 MERCURIC CHLORIDE

	NORYL	POLYPROPYLENE	STAINLESS STEEL	BUNA-N	VITON	EDPM
A	A	B	A	A	A	
A	A	C	A	A	A	
A	A	B	A	A	A	
A	A	B	A	A	A	
A	A	B	A	A	-	
A	A	B	B	A	A	
A	A	AB	C	C	A	
A	A	B	A	A	-	
A	C	A	A	A	N/R	
C	C	A	C	C	-	
C	B	A	A	A	N/R	
C	B	A	A	A	N/R	
A	A	A	A	A	A	
A	A	A	A	A	A	
A	A	A	A	A	A	
AC	A	A	A	A	A	
AC	C	A	A	A	N/R	
C	B	A	A	A	N/R	
A	B	C	C	A	A	
A	B	C	C	A	-	
A	B	C	A	A	A	
A	A	C	A	A	A	
A	A	A	A	A	A	
B	A	B	B	A	-	
A	A	C	A	A	A	
A	AB	B	C	A	B	
A	A	B	N/R	B	A	
A	A	A	A	A	A	
C	AB	A	A	A	N/R	
C	AB	A	A	A	N/R	
A	A	B	A	A	A	
C	B	A	C	C	N/R	
A	-	A	-	-	-	
AC	A	A	A	A	A	
A	A	A	A	A	B/C	
A	A	B	A	A	A	
A	A	A	A	A	A	
A	A	B	A	A	A	
A	A	A	A	A	A	
A	A	A	A	A	A	
A	A	A	A	A	A	
A	A	A	A	A	A	
A	A	A	A	A	A	
A	A	A	A	A	A	
A	A	B	N/R	A	A	
A	A	C	A	A	A	

### CHEMICAL

- MERCURIC CYANIDE
- MERCUROUS NITRATE
- MERCURY
- METHYL ALCOHOL
- METHYL CHLORIDE (wet)
- METHYL ETHYL KETONE
- METHYL ISOBUTYL KETONE
- METHYLENE CHLORIDE
- MILK
- MINERAL OIL
- MONOCHLORO BENZENE (dry)
- MONOETHOLAMINE
- NAPHTHA
- NAPHTHALENE
- NICKEL CHLORIDE
- NICKEL NITRATE
- NICKEL SULFATE
- NITRIC ACID
- NITROBENZENE
- OILS, MINERAL
- OILS, OLIVE
- OILS, VEGETABLE
- OLEIC ACID
- OXALIC ACID
- PHOSPHORIC ACID
- PHOTOGRAPHIC SOLUTION/DEVELOPER
- PLATING SOLUTIONS/BRASS
- PLATING SOLUTIONS/CADMIUM
- PLATING SOLUTIONS/CHROME
- PLATING SOLUTIONS/COPPER
- PLATING SOLUTIONS/GOLD
- PLATING SOLUTIONS/LEAD
- PLATING SOLUTIONS/NICKEL
- PLATING SOLUTIONS/SILVER
- PLATING SOLUTIONS/TIN
- PLATING SOLUTIONS/ZINC
- POTASSIUM ACETATE
- POTASSIUM ALUMINUM SULFATE
- POTASSIUM BICARBONATE
- POTASSIUM BICHROMATE
- POTASSIUM CARBONATE
- POTASSIUM CHLORATE
- POTASSIUM CHLORIDE
- POTASSIUM CHROMATE

	NORYL	POLYPROPYLENE	STAINLESS STEEL	BUNA-N	VITON	EDPM
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
AC	A	A	A	C	A	A
C	C	AB	C	A	C	C
C	B	A	C	C	A	A
C	B	A	C	C	A	A
C	B	AB	C	B	C	C
A	A	A	A	A	A	A
AC	B	A	A	A	A	N/R
C	B	A	C	A	A	N/R
A	A	A	-	-	-	-
C	B	A	A	A	A	N/R
C	A	A	C	A	A	N/R
A	A	C	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	AB	A	C	A	A	C
C	AB	A	C	A	A	A
A	A	A	A	A	A	N/R
A	A	A	A	A	A	A
AC	A	A	A	A	A	AC
AC	AB	B	A	A	A	C
A	A	B	A	A	A	A
A	A	B	C	A	A	A
A	A	B	A	A	A	A
A	A	-	C	A	A	A
A	A	-	A	A	A	A
A	A	-	C	A	A	A
A	A	-	A	A	A	A
A	A	A	A	A	A	A
A	A	B	C	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	B
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	B	A	A	A	A
A	A	A	A	A	A	A

## CHEMICAL

POTASSIUM CYANIDE  
 POTASSIUM DICHROMATE  
 POTASSIUM FERRICYANIDE  
 POTASSIUM HYDROXIDE  
 POTASSIUM NITRATE  
 POTASSIUM PERMANGANATE  
 POTASSIUM SULFATE  
 POTASSIUM SULFIDE  
 POTASSIUM SULFITE  
 PROPYL ACETATE  
 PROPYL ALCOHOL  
 PYRIDINE  
 SALT BRINE  
 SEA WATER  
 SILICONE OIL  
 SOAP SOLUTIONS  
 SODIUM ACETATE  
 SODIUM BICARBONATE  
 SODIUM BISULFATE  
 SODIUM BISULFITE  
 SODIUM BORATE (Borax)  
 SODIUM BROMIDE  
 SODIUM CARBONATE  
 SODIUM CHLORATE  
 SODIUM CHLORIDE  
 SODIUM CHROMATE  
 SODIUM CYANIDE  
 SODIUM DICHROMATE  
 SODIUM FERRICYANIDE  
 SODIUM FLUORIDE  
 SODIUM HYDROXIDE  
 SODIUM HYPOCHLORITE  
 SODIUM NITRATE  
 SODIUM NITRITE  
 SODIUM PHOSPHATES  
 SODIUM SILICATE  
 SODIUM SULFATE  
 SODIUM SULFIDE  
 SODIUM SULFITE  
 SODIUM THIOSULFATE  
 STANNIC CHLORIDE  
 STARCH  
 STEAM  
 STODDARD SOLVENT

	NORYL	POLYPROPYLENE	STAINLESS STEEL	BUNA-N	VITON	EDPM
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	B	A	A	A
A	A	B	B	C	A	A
A	A	B	A	A	A	A
A	AB	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	-	-	-	-
A	-	A	C	C	A	A
A	A	A	A	A	A	A
AC	A	A	C	C	A	A
A	A	B	A	A	A	A
A	A	C	A	A	A	A
A	A	A	A	A	A	A
A	A	A	B	C	A	A
A	A	A	A	A	A	A
A	A	C	A	A	A	A
A	A	AB	A	A	A	A
A	A	B	A	A	A	A
A	A	C	A	A	A	A
A	A	B	A	A	A	A
A	A	A	B	A	A	A
A	A	B	A	A	A	A
A	-	A	A	A	-	-
A	A	B	A	A	A	A
A	A	B	A	A	A	A
A	A	B	A	A	A	A
A	A	B	N/R	B	A	A
A	A	B	C	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	B	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	-
A	A	C	A	A	A	A
A	A	A	A	A	A	A
A	A	A	N/R	B	A	A
C	B	A	A	A	A	N/R

**CHEMICAL**

SUGAR JUICE  
 SULFOLENE  
 SULFUR DIOXIDE (wet)  
 SULFURIC ACID  
 TANNIC ACID  
 TANNING LIQUOR  
 TARTARIC ACID  
 TETRAHYDROFURAN  
 TOLUENE (Toluol)  
 TRICHLORACETIC ACID  
 TRICHLORETHYLENE  
 TRICHLOROTRI-FLUOROETHANE (Freon 113)  
 TRITHANOLAMINE  
 TRISODIUM PHOSPHATE  
 TURPENTINE  
 UREA  
 URINE  
 VINEGAR  
 WATER, DISTILLED  
 WATER, DE-IONIZED  
 WATER, DE-MINERALIZED  
 WHISKEY  
 WHITE LIQUOR (Pulp Mill)  
 WHITE SPIRIT  
 WINE  
 XYLENE (Xylol, Xylole)  
 ZINC CHLORIDE  
 ZINC SULFATE

	NORYL	POLYPROPYLENE	STAINLESS STEEL	BUNA-N	VITON	EDPM
A	A	A	A	A	A	A
A	-	-	-	-	-	-
A	AB	C	C	A	A	A
B	AB	C	C	A	B	B
A	A	B	A	A	A	A
A	A	A	C	A	A	A
A	A	B	A	A	A	B
C	B	A	C	C	C	N/R
C	BC	A	C	A	A	N/R
A	A	C	C	C	C	A
C	C	A	C	A	A	N/R
C	-	A	A	A	A	N/R
A	C	A	C	C	C	-
A	A	A	A	A	A	A
A	B	A	C	A	A	N/R
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
A	A	A	A	A	A	A
C	-	-	A	A	A	N/R
A	A	A	A	A	A	A
C	C	A	C	A	A	N/R
A	A	B	A	A	A	A
A	A	A	A	A	A	A