

# **Chemical Hand Pumps**



### Model 90P

Rotary action Polypropylene pump, viton seals, lightweight, durable, corrosion-resistant, suitable for trouble free dispensing of lubricant products, water and water based chemicals (W.W.A.F.), many acid and alkali solutions. Dispenses fluid in either direction, barbed fitting for attaching plastic hoses, will fit steel or plastic drum.

### Model 90PT

Same as 90P except has Teflon seals extending the range of chemicals that can be pumped.



## Model 90R

Rotary action Ryton pump with same characteristics as 90P except will handle more aggressive chemicals.

### Model 90RT

Same as 90R except has Teflon seals extending the range of chemicals that can be pumped.



### Model 490S

Piston action Polypropylene pump, viton and polypropylene seals, lightweight, durable, corrosion-resistant, suitable for dispensing of lubricant products, water and water based chemicals (W.W.A.F.), many acid and alkali solutions. Will fit 16-55 gal. drum. Economy Priced.



### **Model 5000**

High volume drum pump has two symmetrical rotors rotating in opposite directions developing more than twice the volume that a standard rotary pump will driver. Recommended for gasoline, kerosene, heavy oil and spindle oil. One liter per revolution. Pumping distance 45' vertical & 150' horizontally. Can be used clockwise or counterclockwise. Adjustable bung fits 55 gal drum.

Use the chart below to determine the best pump for your needs.

X is recommended, N/R is not recommended.

Pump Model:	490-S	90P	90R	90PT	90RT
ACETALDEHYDE	Χ	Χ	Χ	Χ	Χ
ACETIC ACID - GLACIAL	N/R	N/R	N/R	Χ	Χ
ACETIC ACID 20%	N/R	N/R	N/R	Χ	Χ
ACETIC ACID 80%	N/R	N/R	N/R	Χ	Χ
ACETIC ACID	N/R	N/R	N/R	Χ	Χ
ACETIC ANHYDRIDE -	N/R	N/R	N/R	Χ	Χ
ACETONE	N/R	N/R	N/R	Χ	Χ
ALCOHOLS					
— AMYL	Χ	X	X	Χ	X
— BUTYL	Χ	X	Χ	Χ	X
— METHYL (METHANOL)	Χ	X	N/R	Χ	N/R
— PROPYL	X	Χ	N/R	Χ	N/R

ALUMINUM HYDROUS	Χ	Х	N/R	Χ	N/R
ALUM POTASSIUM SULFATE 100%	Χ	X	N/R	Χ	N/R
AMMONIA 10%	Χ	Χ	Χ	Χ	N/R
AMMONIA ANHYDROUS	N/R	N/R	N/R	Χ	X
AMMONIUM HYDROXIDE	Χ	Χ	Χ	Χ	Χ
AMMONIUM LIQUIDS	N/R	N/R	N/R	Χ	N/R
AMMONIUM NITATE	Χ	Χ	Χ	Χ	Χ
AMMONIUM PERSULFATE	N/R	N/R	N/R	Χ	N/R
AMMONIA PHOSPHATE	N/R	N/R	N/R	N/R	N/R
— DIBASIC	Χ	Χ	N/R	Χ	N/R
— MONO BASIC	Χ	Χ	N/R	Χ	N/R
— TRIBASIC	Χ	Χ	N/R	Χ	N/R
AMMONIUM SULFATE	N/R	N/R	N/R	Χ	Χ
AMYL ACETATE	N/R	N/R	N/R	N/R	Χ
ANTI-FREEZE-GLYCOL	Χ	Х	Х	Х	Χ
ANILINE	N/R	N/R	N/R	N/R	Χ
ARSENIC ACID	Х	Х	N/R	Х	N/R
BARIUM CARBONATE	Χ	Χ	N/R	Χ	N/R
BARIUM CHLORIDE	Х	Х	Х	Х	N/R
BARIUM HYDROXIDE	Χ	Χ	Χ	Χ	N/R
BARIUM SULFATE	Х	Х	Х	Х	N/R
BARIUM SULFIDE	Χ	Χ	N/R	Χ	N/R
CHROMIC ACID 50%	N/R	N/R	Х	N/R	Χ
CITRIC ACID	Χ	Χ	N/R	Χ	N/R
COPPER CYANIDE	Х	Х	X	X	Х
COPPER NITRATE	Χ	Χ	N/R	Χ	N/R
COPPER SULFATE 5%	Χ	Х	Х	Х	X
DETERGENTS	Χ	Χ	Χ	N/R	N/R
DIESEL FUEL	N/R	N/R	Х	N/R	N/R
ETHYL ACETATE	N/R	N/R	N/R	N/R	Χ
ETHYL CHLORIDE	N/R	N/R	Х	N/R	Х
ETHYLENE CHLORIDE	N/R	N/R	Χ	N/R	Χ
ETHYLENE DICOHLORIDE	Х	Х	X	Χ	X

ETHYLENE GLYCOL	Χ	Χ	Χ	Χ	Χ
FERRIC NITRATE	Χ	Χ	Χ	Χ	Χ
FORMALDEHYDE	Χ	Χ	Χ	Χ	Χ
FORMALDEHYDE 40%	N/R	N/R	N/R	Χ	Χ
FORMIC ACID	Χ	X	Χ	Χ	Χ
FREON 11	N/R	N/R	N/R	N/R	Χ
FUEL OIL	N/R	N/R	Χ	N/R	Χ
FURAN RESIN	N/R	N/R	Χ	N/R	Χ
FURFURAL	N/R	N/R	N/R	N/R	Χ
GASOLINE	N/R	N/R	Χ	N/R	Χ
GELATIN	X	X	N/R	Χ	N/R
GLUCOSE	Χ	Χ	N/R	Χ	N/R
GLYCERIN	Χ	X	N/R	Χ	N/R
HEPTANE	N/R	N/R	Χ	N/R	Χ
HEXANE	N/R	N/R	Χ	N/R	Χ
HYDROCYANIC ACID	Χ	Χ	N/R	Χ	N/R
HYDROGEN PEROXIDE 30%	X	Χ	N/R	Χ	N/R
HYDROGEN PEROXIDE	Χ	Χ	N/R	Χ	N/R
HYDROGEN SULFIDE	Χ	Χ	Χ	Χ	Χ
(AQUEOUS SOLUTION)	N/R	N/R	N/R	N/R	N/R
HYDROGEN SULFIDE	N/R	N/R	Χ	N/R	Χ
IODINE (IN ALCOHOL)	Χ	Χ	N/R	Χ	N/R
JET FUEL (JP3, JP4, JP5)	N/R	N/R	Χ	N/R	Χ
KEROSENE	N/R	N/R	Χ	N/R	Χ
KETONES	N/R	N/R	N/R	N/R	Χ
LACTIC ACID	Χ	Χ	Χ	N/R	Χ
LAQUERS	N/R	N/R	N/R	N/R	N/R
LAQUER THINNERS	N/R	N/R	N/R	Χ	N/R
LEAD ACETATE	N/R	N/R	N/R	Χ	N/R
LINSEED OIL	Χ	Х	N/R	N/R	N/R
MAGNESIUM CHLORIDE	X	Χ	Χ	Χ	Χ
MAGNESIUM HYDROXIDE	N/R	N/R	Χ	X	Χ
MAGNESIUM NITRATE	N/R	N/R	N/R	Χ	Χ

MAGNESIUM SULFATE	Χ	Χ	Χ	Χ	Χ
MERCURY	Χ	X	N/R	Χ	N/R
METHYL ETHYL KETONE	N/R	N/R	N/R	N/R	Χ
METHYL ISOBUTYL KETONE	N/R	N/R	N/R	N/R	Χ
NAPTHA	Χ	Χ	Χ	Χ	Χ
NAPTHALENE	N/R	N/R	N/R	N/R	Χ
NICKEL CHLORIDE	Χ	Χ	N/R	Χ	N/R
NICKEL SULFATE	Χ	Χ	N/R	Χ	N/R
NITRIC ACID (10%)	Χ	Χ	N/R	Χ	N/R
NITRIC ACID (20%)	Χ	Χ	N/R	Χ	N/R
NITRO BENZENE	N/R	N/R	N/R	N/R	Χ
OILS —					
— COTTON SEED MINERAL OIL	Χ	Χ	Χ	Χ	Χ
— OLIVE OIL	Χ	Χ	N/R	Χ	N/R
— ORANGE OIL	Χ	Χ	N/R	Χ	N/R
OXALIC ACID (COLD)	Χ	Χ	N/R	Χ	N/R
PARAFFIN	Χ	Χ	N/R	Χ	N/R
PERCHLOROETHYLENE	N/R	N/R	Χ	N/R	Χ
PHENOL 10%	N/R	N/R	Χ	N/R	Χ
PHENOL (CARBOLIC ACID)	N/R	N/R	Χ	N/R	Χ
PHOSHORIC ACID (TO 40%)	Χ	Χ	Χ	Χ	Χ
PHOSHORIC ACID (40-100%)	Χ	Χ	Χ	Χ	Χ
PHOTOGRAPHIC (DEVELOPER)	Χ	Χ	N/R	N/R	N/R
PLATING SOLUTIONS —					
ANTIMONY PLATING 130 F	Х	Х	N/R	X	N/R
ARSENIC PLATING 110 F	X	Χ	N/R	Χ	N/R