



Abaque Series Hose Pump
Material Compatibility Chart

Section 1101
Effective December 2000
Replaces New

Materials of Construction																
NR	Natural Rubber	PP	Poly Propylene	A = Excellent												
NBR	Natural	PVDF	Polyvinylidene fluoride	B = Poor												
EPDM	Ethyl Propylene Rubber	ALU	Aluminum	C = Bad												
Stainless	Stainless Steel															
Fluid	Temperature (Celcius)	Density (-)	Viscosity (cPo)	NR	NBR	EPDM	STAINLESS	PP	PVDF	ALUMINIUM	CAST IRON	STEEL	BRONZE	NEOPRENE	Fluorocarbon (FKM)	PTFE
ACETIC ACID 10%	20.0	1.05	3.1	A	C	A	A	B	A	B	C	C	C	A		A
ACETIC ACID 100%	20.0	1.05	1.2	B	C	A	A	B	A	B	C	C	C	C		A
ACETIC ACID 25%	20.0	1.05	3.1	B	C	A	A	B	A	B	C	C	C	A		A
ACETIC ACID 50%	20.0	1.05	2.9	B	C	A	A	B	A	B	C	C	C	C		A
ACETONE	20.0	0.98	1.7	B	C	A	A	C	C	A	A	A	A	C	C	A
ALCOHOL	20.0	0.80	1.0	A	A	A	A	A	A	B	A			A	A	B
ALUM. SOLUTION (ALUM. SULFATE)	20.0	1.62	10.0	A	A	A	B		A		C	B	A	A	B	A
AMMONIUM HYDROXIDE 75%	20.0	0.90	2.6	B	C	C	A	A	A	C	A	A	C	A	B	A
BEER	20.0	1.10	20.0	A	A	A	A	B	A	A	C	C	A	A	A	A
BENZENE	20.0	1.20	1.0	C	C	C	A	B	A	B	B	B	A	C	A	A
BLACK LIQUOR SOAP (SULFATE)	20.0	0.95	8000.0	A	A	A	C	A		B					A	
BLOOD	20.0	1.12	1.2	A	A	A	A			A	C	C	A	A	B	A
BUTANE (FLUID)	20.0	0.56	0.2	C	A	C	A	B	A	A	A	A	A	A	A	A
CALCIUM CHLORIDE	20.0	1.07	1.2	A	A	A	C	A	A	C	C	B	A	C	A	A
CARBON ACTIVATED	20.0	1.30	5000.0	A	A	A	A	A	A	A	A	B	A	C	A	A
CARBON TETRACHLORIDE	20.0	1.59	1.0	C	C	C	A	B	A	C	C	C	A	A	A	A
CASTOR OIL	20.0	0.96	990.0	C	A	C	A		A	A	B	B	A	A	A	A
CATSUP (KETCHUP)	20.0	1.30	4500.0	A	B	B	A	A		C	C	C	C	A	A	A
CHOCOLATE	30.0	1.30	7000.0	B	A	B	A	A	A	A	A	C	C	C	A	A
CHROMIC ACID < 30%	20.0	1.22	2.1	C	C	A	A	A	A	C	C	B	C	C	A	A
CHROMIC ACID > 30%	20.0	1.20	2.0	C	C	B	B	A	A	C	C	B	C	B	A	A
CIMENT SLURRY 70%	20.0	1.90	700.0	A	B	B	B	B	B	B		B	C	A	B	B
CLAY, MUD (MINERAL) 100 G/L	20.0	1.10	500.0	A	A	A	A	A	A	A	A	B	B	A	A	A
CLAY, MUD (MINERAL) 300 G/L	20.0	1.40	5000.0	A	A	A	A	A	A	A	A	C	B	A	A	A
CLAY, MUD (MINERAL) 200 G/L	20.0	1.20	2000.0	A	A	A	A	A	A	A	A	A	B	A	A	A
COPPER SULFATE 10%	20.0	1.15	6.6	A	A	A	A	A	A	C	C	A	C	A	A	A
DIATOMACEOUS EARTH	20.0	1.40	25000.0	A	A	A	A	A	A	A	A		B	A	A	A
DIESEL OIL (FUEL)	20.0	0.84	4.2	C	B	C	A	B	A	A	A	A	A	A	A	A
ETHER	20.0	0.71	0.2	C	B	C	A	C		A		B		C	C	A
ETHYL ALCOHOL, ETHANOL	20.0	0.79	1.2	A	A	A	A	A	A	A	A	C	A	A	A	A
ETHYLENE GLYCOL	20.0	1.11	19.9	A	A	A	A	A	A	A	B	A	A	A	A	A
FERRIC CHLORIDE	20.0	1.22	2.3	A	A	A	A	C	A	A	C	A		C	A	A
FISH PAST	20.0	1.74	22000.0	B	A	B	A	A	A	A	A	A	C	A	A	A
FUEL OIL, EXTRA HEAVY	20.0	0.95	72.0	C	A	C	A	C	A	A		A	A	C	A	A

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Stainless *Stainless Steel*

Fluid	Temperature (Celcius)	Density (-)	Viscosity (cPo)	NR	NBR	EPDM	STAINLESS	PP	PVDF	ALUMNIUM	CAST IRON	STEEL	BRONZE	NEOPRENE	Fluorocarbon (FKM)	PTFE
FUEL OIL, HEAVY	20.0	0.95	950.0	C	B	C	A	C	A	A		A	A	C	A	A
FUEL OIL, LIGHT	20.0	0.94	155.0	C	B	C	A	C	A	A		A	A	C	A	A
GASOLINE (NO LEAD)	20.0	0.75	0.6	C	C	C	B	C	C	A	A	A	A	C	A	A
GASOLINE	20.0	0.70	0.6	C	C	C	A	C	C	A	A	A	A	C	A	A
GLUE (WATER BASED)	20.0	1.10	2000.0	A	A	A	A	A	A	A	A	A	A	A	A	A
GLYCERENE 99%	20.0	1.30	1980.0	A	A	A	A	A	A	A	A	A	A	A	A	A
GLYCERENE 100%	20.0	1.26	1490.0	A	A	A	A	A	A	A	A	A	A	A	A	A
GLYCERENE40%	20.0	1.09	3.7	A	A	A	A	A	A	A	A	A	A	A	A	A
HONEY	20.0	1.20	15000.0	A	A	A	A	A	A	A	A	A	A	A	A	A
HYDROCLORIC ACID 8%	20.0	1.07	1.5	A	C		C	A	A	C	C	C	C	C	A	A
HYDROCLORIC ACID 15%	20.0	1.15	1.9	A	C	A	C	A	A	C	C	C	C	C	A	A
HYDROCLORIC ACID 30%	20.0	1.18	2.1	A	C	B	C	A	A	C	C	C	C	C	A	A
HYDROCLORIC ACID 38%	20.0	1.30	2.7	A	C		C	A	A	C	C	C	C	C	A	A
HYDROGEN PEROXIDE 48%	20.0	1.05	1.8	A	C	B	A	A	A	A		C	C	A	A	A
KAOLIN 100 G/L	20.0	1.10	200.0	A	A	A	A	A	A	A	A	A	A	A	A	A
KEROSENE, LIGHT	20.0	0.79	1.3	C	A	C	A	B	A	A	A	B	A	B	A	A
LARD	50.0	0.60	1.0	A	A	C	A	A	A	A	A	A	A	B	A	A
LATEX (PAPER INDUSTRIES)	20.0	1.20	3000.0	A	A	B	A	A	A	A	A	A	A	C	A	A
LATEX EMULSION (GLUE)	20.0	1.05	200.0	A	B	B	A	A	A	A	A	A	A	C	A	A
LIMESTONE (CREAM) 100 G/L	20.0	1.10	100.0	A	B	A	A	A		C	A	B	B	B	A	A
LIMESTONE (CREAM) 200 G/L	20.0	1.20	250.0	A	B	A	A	A		C	A	B	B	B	A	A
LIMESTONE (CREAM) 300 G/L	20.0	1.30	400.0	A	B	A	A	A		C	A	B	B	B	A	A
LINSEED OIL	20.0	0.90	53.0	A	A	C	A	A	A	A	B	B	A	C	A	A
MERCURY	40.0	13.60	1.5	A	A	A	A	A	A	C	A	A	C	A	A	A
METHANOL	20.0	0.80	0.6	A	A	B	A	A	A	B	A	B	A	A	C	A
METHANOL	70.0	1.15	0.4	A	A	B	A	A	A	B	A	B	A	A	C	A
METHYL ETHYL KETONE	20.0	1.03	0.9	C	C	B	A	C	C	B	B	B	B	C	C	A
MILK, FRESH	20.0	1.40	2.2	B	A	B	A	A	A	A	C	C	C	A	A	A
MOLASSES, FINAL - AVERAGE	20.0	1.40	350000.0	A	A	A	A	A	A	A	A	A	A	A	A	A
MOLASSES, FINAL - AVERAGE	40.0	1.40	14000.0	A	A	A	A	A	A	A	A	A	A	A	A	A
MOLASSES, FINAL - AVERAGE	60.0	1.40	4200.0	A	A	A	A	A	A	A	A	A	A	A	A	A
MOLASES, FIRST - AVERAGE	20.0	1.40	10000.0	A	A	A	A	A	A	A	A	A	A	A	A	A
MOLASES, FIRST - AVERAGE	40.0	1.40	1400.0	A	A	A	A	A	A	A	A	A	A	A	A	A
MOLASES, FIRST - AVERAGE	60.0	1.40	560.0	A	A	A	A	A	A	A	A	A	A	A	A	A
MOLASSES, SECOND - AVERAGE	20.0	1.40	84000.0	A	A	A	A	A	A	A	A	A	A	A	A	A
MOLASSES, SECOND - AVERAGE	40.0	1.40	4200.0	A	A	A	A	A	A	A	A	A	A	A	A	A
MOLASSES, SECOND - AVERAGE	60.0	1.40	1260.0	A	A	A	A	A	A	A	A	A	A	A	A	A
MORTAR (FIBROUS)	20.0	2.00	20000.0	A	B	B	A	A	A	A	A	B	B	A	A	A
MUSTARD (FRENCH)	20.0	1.30	4800.0	A	A	A	A	A	A	A	B	C	C	A	A	A
NITRIC ACID < 10%	40.0	1.10	2.2	C	C	A	A	A	A	C	C	B	C	C	A	A
NITRIC ACID > 50%	20.0	1.42	2.7	C	C	C	A	C	A	A	C	C	C	C	A	A
NITRIC ACID 10 TO 25%	20.0	1.20	2.3	C	C	B	A	B	A		C	B	C	C	A	A

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Fluid	Temperature (Celcius)	Density (-)	Viscosity (cPo)	NR	NBR	EPDM	STAINLESS	PP	PVDF	ALUMNIUM	CAST IRON	STEEL	BRONZE	NEOPRENE	Fluorocarbon (FKM)	PTFE
NITRIC ACID 25 TO 50%	20.0	1.37	2.4	C	C	B	A	B	A	C	C	B	C	C	A	A
OIL S.A.E. 10	30.0	0.88	41.1	C	A	C	A	A	A	A	A	B	A	B	A	A
OIL S.A.E. 30	20.0	0.90	320.0	C	A	C	A	A	A	A	A	B	A	B	A	A
OIL S.A.E. 70	20.0	0.92	2100.0	C	A	C	A	A	A	A	A	B	A	B	A	A
OLIVE OIL	20.0	0.91	40.0	C	A	C	A	A		A	A			C	A	A
PAINT (WATER BASED)	20.0	1.40	900.0	A	A	B	A	A	A	A	B	A	A	C	A	A
PALMITIC ACID	70.0	0.91	8.0	C	A	B	A	A	A	C	C				A	
PEANUT OIL	20.0	0.92	60.0	C	A	C	A	B	A	A	A	B		C	A	A
PETROLIUM CRUDE	20.0	0.82	6.2	C	B	C	A	A	A	A	B	A	A	C	C	A
PHENOL A 100%	60.0	1.07	5.9	C	C	C	A	C	A	B	C	A	A		A	A
PHENOL B 5%	20.0	1.07	3.5	C	C	C	A	C	A	B	C	B	A		A	A
PIGMENT SLURRY	20.0	1.55	900.0	A	A	A	A	B	B	B	B	B	B	A	A	A
POTASSIUM HYDROXIDE 25%	20.0	1.20	1.9	A	C	A	A	A	A	C	C	C	C	B	C	A
POTATOES WASTE SLURRY	40.0	1.20	15000.0	A	A	A	A	A	A	A	A	C		A	A	A
PROPANE (LIQUID)	20.0	0.51	0.1	C	A	C	A	B	B	A	A		A	B	A	A
PROPANE (LIQUID)	60.0	0.51	0.1	C	A	C	A	B	B	A	A	A	A	B	A	A
PYRITE SLURRY	20.0	2.30	15000.0	A	A	A	A	A	A	A	A	A	A	A	A	A
ROSIN OIL	20.0	0.98	1600.0	C	B	C	A	A		A	B	A	B	C	A	A
ROSIN OIL	40.0	0.98	7450.0	C	B	C	A	A		A	B	B	B	C	A	A
SALT SODIUM CHLORIDE 20%	10.0	1.15	2.1	A	A	B	A	A	A	B	B	B	B	A	A	A
SILICON GREASE	20.0	2.00	100000.0	C	A	C	A	A			A	B	A	A	A	A
SODIUM HYDROXIDE 20%	20.0	1.22	4.3	A	C	B	B	A	A	C	B	A	B	B	A	A
SODIUM HYDROXIDE 50%	30.0	1.52	64.0	C	C	B	A	A	C	C	C	B	C	C	A	A
SODIUM HYPOCHLORIDE 48% (BLEACH)	20.0	1.80	50.0	A	B	C	C	B	A	C	C	A	C	B	A	A
STERIC ACID	70.0	0.85	11.6	A	A	B	A	B	A	B		C			A	
SUCROSE 20%	20.0	1.08	2.0	A	A	A	A	A	A	A	B	C	A	B	A	A
SUCROSE 60%	20.0	1.28	56.3	C	A	A	A	A	A	A	B		A	B	A	A
SUCROSE 70%	10.0	1.34	1220.0	A	A	A	A	A	A	A	B	A	A	A	A	A
SULFUROUS ACID > 10%	20.0	1.70	15.0	A	B	A	A	A	A	C	C	A	C	B	A	A
SULFUROUS ACID 10 TO 75%	20.0	1.45	7.0	B	C	B	B	A	A	C	C	C	C	B	A	A
SULPHERIC ACID < 5%	20.0	1.84	24.0	A	B	A	B	C	A	C	C	C	B	C	A	A
SULPHERIC ACID > 75%	20.0	1.40	4.7	C	C	A	B	C	A	C	C	C	B	C	A	A
SULPHERIC ACID 10 TO 75%	20.0	1.50	6.8	C	C	A	C	A	A	C	C	C	B	C	A	A
SULPHERIC ACID 5 TO 10%	20.0	1.72	15.0	B	C	A	C	A	A	C	C	C	B	C	A	A
TEST	20.0	1.20	1000.0													
TITANIUM DIOXIDE SLURRY (73%)	20.0	2.20	600.0	A	B	A	A	A	A	A	A	A	A	A	A	A
TOULINE	20.0	1.05	6.8	C	C	C	A	C	A	A	A	A	A	C	A	A
TOAMTO PURRE (38%)	20.0	1.30	18000.0	A	A	A	A	A	A	A	A	A	A	A	A	A
TOOTH PASTE (GEL)	20.0	1.60	30000.0	A	A	A	A	A	A	B	A	A	A	A	A	A
TRICHLORIDE-ETHENE	20.0	1.47	6.4	C	B	C	A	B	A	C	C	B	B	C	A	A
TURPENTINE	20.0	0.95	3.6	C	B	C	A	B	A	A	B	A	A	C	A	A
VINEGAR	20.0	1.00	1.7	A	B	A	A	A	A	C	C	B	B	B	A	A

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WATER	20.0	1.00	1.0	A	A	A	A	A	A	A	B	C	A	B	A	A
WATER SALT	20.0	1.05	1.0	A	A	B	C	A	A	C	C	C	B	B	A	A
WHITE SPIRIT (FUEL OIL)	20.0	0.90	6.0	C	B	C	A	B	A	A	A	A	A	C	A	A
WINE	20.0	0.96	6.4	A	A	A	A	A	A	A	C	C	C	A	A	A
WINE MUST	20.0	1.60	100.0	A	A	A	A	A	A	A	C	C	C	A	A	A
XYLENE	20.0	0.86	7.0	C	C	C	A	B	A	A	A	A	A	C	A	A



1809 Century Ave., Grand Rapids, MI 49503
 T: 616-241-1611 F: 616-241-3752
 E-mail: blackmer@blackmer.com Internet: www.blackmer.com