2900 MacArthur Blvd. Northbrook, IL. USA 60062 www.serfilco.com (800) 323 - 5431

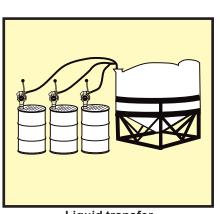
BULLETIN P-404_AE JUNE 2013

For point-of-use dispensing chemicals used for:

PLATING / PHARMACEUTICAL / INDUSTRIAL / PETROLEUM PRODUCTS and other stringent applications



Designed for the transfer or dispensing of concentrates, additives or other liquids which are purchased in bulk but are used in small quantities. This low cost pump delivers one pint per stroke or one quart with the forward and back push/pull of the handle. The variety of materials of construction enables the user to select those which are specifically required for his individual needs according



Liquid transfer for batch mixing.

A tough, quality engineered pump

- QUALITY ENGINEERED THERMOPLASTIC CONSTRUCTION
- CONTROLLED DISCHARGE RATE
 The pump discharges approximately one (1) quart on every complete forward and backward cycle.
- SUCTION LIFT: Tested for 15 ft. minimum
- DISCHARGE HEAD: Up to 25 ft.
- VISCOSITIES UP TO 2000 SSU
- TWO POSITION PUMP HANDLE
 Handle can be mounted above the pump or below.
- TAMPER PROOF HANDLE
 Can be padlocked to protect against unauthorized use.
- SELF-LUBRICATING PTFE PISTON RING
 Operates wet or dry for long life

to chemical resistance charts. The use of this pump eliminates having to pour from one container to another and avoids costly and hazardous spilling and splashing.

See following page for specifications and ordering information.



Low cost permits use of multiple pumps to avoid cross-contamination.

SERIES 'HP' | HAND DISPENSING PUMP

2900 MacArthur Blvd. Northbrook, IL. USA 60062 www.serfilco.com (800) 323 - 5431

ELIMINATES "DUMPING" & SPILLING OF SOLUTIONS

The HAND DISPENSING PUMP is a double acting piston type which will handle a wide range of solutions. The pump body, valves, valve seats and piston are all made of chemically resistant, performance engineered plastics, especially compounded to give the pump strength and rigidity. All internal metal parts in contact with the liquid are made of 316 stainless steel. The "O"-ring and gasket materials are cork-nitrile, Viton or EPDM (ethylene propylene). 1" NPT suction, 3/4" NPT discharge.

TO ORDER, use Price Code Number

Select pump from chart below and add discharge hose and suction tube to complete assembly

PUMP

| MODEL | MATERIALS OF CONSTRUCTION | "O"-RING | GASKET | PRICE CODE NO. |
|-------|---|----------|--------------|-------------------|
| HPV | POLYESTER (glass reinforced) - housing, cover plate, piston, valves and bung adapter | VITON® | VITON | 59-0001 |
| HPN | | VITON | CORK-NITRILE | 59-0002 |
| HPE | | EPDM | EPDM | 59-0003 |
| HRV | RYTON® (glass reinforced) - housing, cover plate, ECTFE piston, valves and bung adapter | VITON | VITON | 59-0004 |
| HRN | | VITON | CORK-NITRILE | 59-0005 |
| HRE | | EPDM | EPDM | 59-0006 |

All models have 316 stainless steel piston rod, fasteners and suction screen in contact with liquid. All pumps include a 2" NPT bung adapter.

HOSES & SUCTION TUBE

| MODEL | DESCRIPTION | PRICE CODE NO. | | | | |
|---|---|----------------|--|--|--|--|
| DISCHARGE HOSES (Add to Model No. and Price Code No.) | | | | | | |
| -1 | 8' EPDM, w/polyester elbow & nozzle | -1 | | | | |
| -2 | 8' Nitrile (Buna-N), w/polyester elbow & nozzle | -2 | | | | |
| -3 | 8' PVC black vinyl, w/polyester elbow & nozzle | -3 | | | | |
| -4 | 8' Cross linked polyethylene, w/polyester elbow & nozzle | -4 | | | | |
| -5 | -5 8' Cross linked polyethylene, w/ECTFE elbow & nozzle | | | | | |
| -6 | 8' EPDM, w/ECTFE elbow & nozzle | -6 | | | | |
| -7 | 8' Nitrile (Buna-N), w/ECTFE elbow & nozzle | -7 | | | | |
| -8 | 8' PVC, w/ECTFE elbow & nozzle | -8 | | | | |
| SUCTIO | N TUBE (Add to Model No. and Price Code No.) | | | | | |
| -A | 2 pc. 1" polyester , 34" long w/polyester coupling & PTFE tape | -A | | | | |
| -В | 2 pc. 1" PTFĖ, 34" long w/ECTFE coupling & PTFE tape | -B | | | | |
| -C | 2 pc. 1" UHMW polyethylene#, 34" long w/ ECTFE coupling | -C | | | | |
| -E | 1 pc. 3/4" PVC flexible, 35" long (prevents tearing of drum liners) | -E | | | | |
| | #LUkan Liinh Malan Jan Wainh ta | .10. 1 | | | | |

^{*}Ultra High Molecular Weight polyethylene

OPTIONAL EQUIPMENT

| | MODEL | ODEL DESCRIPTION | | | | |
|---|--|------------------|--|--|--|--|
| DISCHARGE SPOUT (Add to Model No. and Price Code No.) | | | | | | |
| | -M Polyester -N ECTFE | | | | | |
| I | BUTTRESS-BUNG ADAPTER (2" buttress x 2" NPT) (Add to Model No. & Price Code No.) | | | | | |
| | -R -S | -R -S | | | | |
| | WALL BI | 55-7149 | | | | |

Registered trademarks: Teflon, Viton- DuPont Dow Elastomers; Ryton- Phillips Chemical

A SAFETY PRECAUTIONS

Plastic pumps are not designed nor intended to be used for transferring flammable or explosive liquids. Only metallic pumps which can be grounded and bonded should be used for this purpose. Refer to a chemical resistance data chart for compatibility of materials with liquids to be pumped. Always wear protective safety clothing such as gloves, apron and goggles.



SERIES 'HP' | HAND DISPENSING PUMP

2900 MacArthur Blvd. Northbrook, IL. USA 60062 www.serfilco.com (800) 323 - 5431

CHEMICAL RESISTANCE DATA CHART FOR HAND DISPENSING PUMP

- A RecommendedC Not recommended
- X Insufficient data
- F Consult factory

UHMM'PE BYCOMUYESTER UHMM'ECTERTONUYESTER

| | an. | En | H. | 60 | E | 41 | Co | 3, | . 6. |
|---------------------------------------|-----|-----|-----|----------|----------|--------|--------|---------|---------|
| Acetaldehyde | Α | Α | Α | Α | Α | С | Х | Α | С |
| Acetic acid, 20% | A | A | A | Á* | A | Č | Â | A | Ă |
| Acetic acid, 50% | Α | Α | Α | С | Α | C | Α | Α | Α |
| Acetic acid, glacial | Α | Α | Α | C | Α | C | С | Α | С |
| Acetic anhydride | Α | A* | Α | С | Α | С | X | Α | C |
| Acetone | A | Α | Α | Ç | Ç | Ç | Ç | Α | Ç |
| Aluminum chloride | Α | Α | Α | C | Α | Α | Α | C | Α |
| Aluminum fluoride | A | Α | Α | C | A | A | A | Ç | A |
| Aluminum sulfate | A | A | A | A* | Ā | A | Ā | A | A |
| Ammonia, 30% (cold) Ammonium chloride | A | A | A | C A* | A | C A | A | A | A |
| Ammonium nitrate | Ä | A | A | A* | Ä | Č | A | A | Â |
| Ammonium persulfate | Â | Ä | X | A* | Â | Ă | Â | Ä | Â |
| Ammonium phosphate | Â | Â | Â | A* | Â | Â | Â | Ä | Â |
| Ammonium sulfate | Â | A | A | A* | A | | A | A | A |
| Amyl acetate | Â | A | À | A* | A | CC | X | A | Ĉ |
| Amyl alcohol | Α | Α | Α | Α* | Α | Α | Α | Α | Α |
| Amyl chloride | С | Α | Х | A* | С | Α | X | Α | С |
| Aniline | Α | Α* | Α | С | Α | С | | Α | C |
| Aqua regia | С | A | С | С | С | Α | X | С | С |
| Arsenic acid | A | Α | Α | С | Α | Α | Α | Α | Α |
| Barium chloride | Α | Α | Α | Α* | Α | Α | Α | Α* | Α |
| Barium sulfate | Α | Α | Α | A* | Α | Α | Α | A* | Α |
| Beer | A | Α | A | A* | A | A | X | A | A |
| Benzaldehyde | A | _A* | C | A* | <u>A</u> | Č | X | _A_ | C |
| Benzene (benzol) Benzoic acid | A | A | Α* | A* | C | Ā | Α | A | Č |
| Borax (sodium borate) | A | A | A | A* A* | Č | A | X | A | A |
| Boric acid | A | A | A | A | A A | A A | A A | A | A |
| Bromine water | A | A | C | C | C | A | X | C | A A* |
| Butyl acetate | A | A | A | A* | A | C | ĉ | A | C |
| Butyric acid | Â | Â | A* | Ĉ | Â | Ă | X | Â | Ă |
| Calcium bisulfite | Â | Ä | Â | č | Ĉ | Â | Â | Ä | Â |
| Calcium chloride | Â | A | A | A* | Ă | Â | Â | A | Âl |
| Calcium hypochlorite, 20% | A | A | A | A* | A | A | A | A* | A |
| Calcium sulfate | A | A | A | A* | A | A | A | À | A |
| Carbon tetrachloride | Α | Α | A* | Α* | C | Α | Α | Α | A* |
| Carbonic acid | Α | Α | Α | С | Α | Α | Α | Α | Α |
| Chloroacetic acid | Α | Α | Α | С | Α | С | X | С | Α |
| Chlorine water | Α | Α | С | С | Α | Α | Α | С | Α |
| Chlorobenzene | Α | Α | Α | С | С | Α | X | Α | С |
| Chloroform (wet) | Α | Α | Α | A* | Ç | Α | Χ | Α | Ç |
| Chlorosulfonic acid | Α | A* | Ç | C | C | С | C | Ç | Α |
| Chromic acid, 10% | Α | Α | Α | C | C | A* | C | Α | Α |
| Chromic acid, 50% | A | A | A* | Č | Č | A* | C | A | A |
| Chromic acid, 80% | A | A | A* | C | Ç | X | Č | Č | Č |
| Citric acid | A | A | A | A* | Ā | Ā | Ā | A | A |
| Copper chloride | A | A | A | X | A | A A | A A | C A | A A |
| Copper cyanide Copper nitrate | A | A | A | A* | A X | A | A | A | Ä |
| Copper sulfate | A | A | A | A | A | A | A | A | A |
| Cresylic acid, 50% | Â | Ä | X | A* | ĉ | Â | Â | Ä | Â |
| Ethyl acetate | A | A | Â | A* | Ă | C | C | A | ĉ |
| Ethyl chloride | Â | A | A | Ĉ | A | Ă | Ă | A | č |
| Ethylene glycol | A | A | A | Ă* | A | A | A | A | Ă* |
| Fatty acids | A | A | X | A* | C | A | A | A | À |
| Ferric chloride | A | A | A | C | Ă | A | A | С | Α |
| Ferric nitrate | Α | Α | Α | A* | Α | Α | Α | A* | A |
| Ferric sulfate | Α | Α | С | С | Α | Α | Α | Α | Α |
| Ferrous chloride | Α | A | Α | Α* | Α | Α | Α | С | Α_ |
| Ferrous sulfate | Α | Α | Α | A* | Α | Α | X | Α* | Α |
| Fluoroboric acid, 30-40% | Α | Α | Α | Α* | Α | Α | Α | Α* | Α |
| Fluosilicic acid, 20% | A | A | A | C A* | A | A | A | Α* | A |
| Formaldehyde, 40% | Α | Α | Α | A* | Α | Α | Α | A | A |
| Formic acid | A | A | A | C | Ā | Ā | Ā | 00 | A* |
| Freon 12 (wet) | A | A | A* | A* | A | A | A | Č | A* |
| Fuel oils Furfural | A | A | A | A ^* | C | A | A | A | A |
| Glycerine (glycerol) | A | A | A | A* | A | C A | X A | A | C A |
| Heptane | A | A | A | A* A* | A C | A | A | A A | A |
| Hexane | C | A | A | A* | C | A | A | A | A* |
| Hydrobromic acid, 40% | A | A | A | C | Ä | A | A | C | A |
| Hydrochloric acid, 0-20% | A | A | A | Ă | A | A | A | CC | Â |
| Hydrochloric acid, 40% | Â | Ä | A | С | Ĉ | Â | Ĉ | С | Â |
| Hydrocyanic acid | Ä | A | Х | A* | Ă | A | Ă | Ă* | A |
| Hydrofluoric acid, 10% | A | A | С | C | A | A* | X | A* C | A* |
| Hydrofluoric acid, 30% | A | A | С | С | A | À | X | С | A* |
| Hydrofluoric acid, 50% | Α | Α | С | CC | Α | Α | X X | Č A* | Α |
| Hydrofluosilicic acid, 20% | Α | Α | l A | C | Α | Α | A | Α* | Α |
| Hydrogen peroxide, 30% | Α | Α | Α* | С | A* | Α | Α | Α* | Α |
| | | | | | | | | | |

* For use in applications where the temperature is 80°F or less.

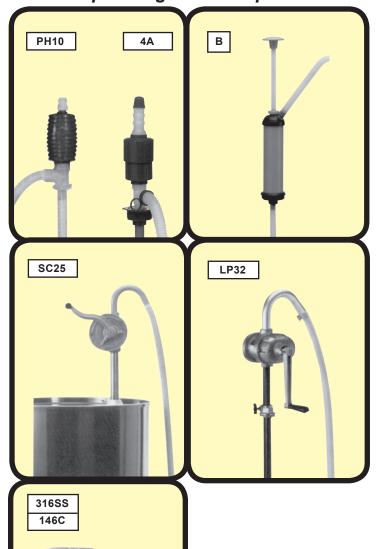
UHMW-PEERYTON LYESTER ORK HITRIL

| Hydrogen peroxide, 50% | Α | Α | С | С | A* | Α | Α | A* | A* |
|-----------------------------|----|-----|--------|---------|--------|------|----|-----|-----|
| | | Â | | č | A* | | | A* | |
| Hydrogen peroxide, 90% | A | | X | L C | | A | A | | C |
| Hydrogen sulfide (Aq. sol.) | A | A | Α | A* | A | Ċ | Α | Α | A* |
| lodine (in alcohol) | Α | Α | С | С | Α | Α | Х | С | C |
| Kerosene | Α | Α | Α | A* | С | Α | Α | Α | Α |
| Ketones | С | Α | Α | Α* | Α | С | Х | Α | C |
| Lacquer thinners | С | Α | Х | С | С | С | С | Α | C |
| Lactic acid | Α | Α | Α | A* | Α | lΑ | Α | Α | Α |
| Lead acetate | A | A | A | A* | A | C | A | A | Â |
| Lubricating oil | A | A | A | À | C | ΙĂ | A | A | Á* |
| Magnesium chloride | A | A | A | A* | Ă | A | A | A* | A |
| Magnesium nitrate | Â | Â | Â | A* | Â | ΙÂ | Â | Â | Â |
| | | | | A* | | | | | |
| Magnesium sulfate | A | A | Α | | A | À | Α | A | A |
| Maleic acid | A | Α | Х | A* | Ç | A | X | A | A |
| Methyl alcohol (methanol) | A | Α* | Α_ | Α* | Α_ | С | Α_ | A | Α* |
| Methyl chloride | Α | Α | Α* | С | С | Α | Х | Α | C |
| Methyl ethyl ketone | С | Α | Α | Α* | Α | С | Х | Α | C |
| Methyl isobutyl ketone | С | Α | Α | Α* | С | С | Х | Α | С |
| Methylene chloride | Č | C | A* | Ċ | Č | Ιč | Α | Α | Č |
| Naphtha | Ă | Ă | À | A* | č | ΙĂ | A | A | Ă |
| Naphthalene | A | A | A | A* | Č | A | X | A | C |
| Nickel chloride | Â | Â | Â | Ĉ | Ă | ΙÂ | Â | A* | Ă |
| Nickel sulfate | | | | | | | | | |
| | Α | Α | A | A* | Α | A | Α | A | A |
| Nitric acid, 10% | Α | A | Α | Α | A | A | C | Α | A |
| NITTIC acid, 20% | Α_ | _A_ | A* | C | _A_ | ļ. | C | _A_ | A |
| Nitric acid, 40% | Α* | Α | С | C | Ç | A | C | Α | Α |
| Nitric acid, anhydrous | Α | Α | Χ | С | Ç | Ç | Ç | A* | C |
| Nitrobenzene | Α | Α | Α | Α* | С | С | С | Α | С |
| Oil and fats | Α | Α | Α | A* | С | A | Α | Α | Α |
| Oleic acid | Ċ | A | Ä | A* | č | Â | A | A | A |
| Oleum | Ă | Â | Á* | Ĉ | Č | Â | X | Â | Ĉ |
| Oxalic acid | Â | Â | À | č | Ă | ΙÀ | Á* | Á* | Ă |
| Phenol | Â | Â | Â | č | Ĉ | ΙÂ | ĺχ | Â | A* |
| Phosphoric acid, 0-80% | Â | Â | Â | Ă | Ă | ΙÂ | Â* | Â | Â |
| | | | | | | | | | |
| Phosphoric acid, 80-100% | A | A | A | A | A | A | X | A | A |
| Potassium bicarbonate | Α | Α | X | A* | Х | Ą | A | Α | A |
| Potassium bromide | Α | Α | Α | Α* | Х | Α | Α | Α | Α |
| Potassium carbonate | Α | Α | Α | A* | Α | Α | Α | Α | Α |
| Potassium chlorate | Α | Α | Α | Α* | Α | Α | Α | Α | Α |
| Potassium chloride | Α | Α | Α | Α* | Α | Α | Α | Α | Α |
| Potassium cyanide | Α | Α | Α | A* | Α | A | Α | Α | Α |
| Potassium dichromate | A | A | A | Ĉ | Â | ΙÀ | A | A | Â |
| Potassium hydroxide | Â | Â | Â | č | Â | Ĉ | Â | Â | Â |
| | | | | | | | | | |
| Potassium nitrate | A | A | À | A* | A | À | A | A | A |
| Potassium permanganate | Α | A | A | C | X | A | Α | Α | A |
| Potassium sulfate | Α | Α | Α | Α* | Α | Α | Α | Α | Α |
| Propyl alcohol | Α | Α | Α | A* | Α | Α | Α | Α | A* |
| Soaps (neutral) | Α | Α | Α | Α | Α | Α | Α | Α | Α |
| Sodium acetaté | Α | Α | Α | A* | Α | l c | Х | Α | Α |
| Sodium bicarbonate | Α | Α | Α | Α* | Α | ΙĂ | Α | Α | Α |
| Sodium bisulfate | A | A | A | A* | A | A | A | A* | A |
| Sodium bisulfite | Â | Â | Ιχ̈́ | A* | Â | ΙÂ | Â | A* | Â |
| Sodium carbonate, 10% | Â | | | | | | | | |
| | | À | À | A* | A | À | À | À | À |
| Sodium chlorate | A | A | A | Α* | Ą | Ą | A | A | A |
| Sodium chloride | Α | Α | Α | Α | Α | A | Α | Α | Α |
| Sodium cyanide | Α | Α | Α | Α* | Α | Α | Α | Α | A |
| Sodium hydroxide, 20% | Α | Α | Α | С | Α | С | Α* | Α | Α |
| Sodium hydroxide, 50% | Α | Α | Α | С | Α | С | Α* | Α | Α |
| Sodium hypochlorite | Α | Α | Α | С | Α | Α | Х | С | Α |
| Sodium nitrate | Α | Α | A | A* | Α | A* | A | Ă* | A |
| Sodium silicate | A | A | A | A* | A | Â | A | À | A |
| Sodium sulfate | A | A | A | A* | A | Â | A | A | A |
| Sodium sulfide | Â | Â | Â | A* | A | Â | X | Â | Â |
| Stannic chloride | | | Λ | Ĉ | ^ | | | C | |
| | A | A | A | | A | À | A | | A |
| Stearic acid | A | A | X | A* | A | À | A | A | A |
| Stoddards solvent | A | A | A | A* | Ċ | À | A | A | Ç |
| Sulfuric acid, 0-30% | Α | Α | Α | Α* | Α | A | Α | Α | Α |
| Sulfuric acid, 30-95% | Α | Α | Α | С | С | Α | Х | С | A* |
| Tannic acid | Α | Α | Α | С | Α | Α | Α | Α | Α |
| Tanning liquors | Α | Α | A X | X | Α | A | Α | Α | Α |
| Tartaric acid | A | A | A | A* | A | A | X | A | A |
| Tetrahydrofuran | C | C | A | A* | A | C | x | Â | C |
| Toluene (toluol) | Ă | Ă | Â | Ĉ | Ĉ | Ă | Â | Â | č |
| Trichloroethylene | Â | Â | A* | č | č | ΙÂ | Ĉ | Â | č |
| | | | | Ι× | | | | | |
| Tricresylphosphate | Ă | Č | Ϋ́ | C A* | A | Ă. | Ϋ́ | Ă | Č |
| Turpentine | A | A | A | | Ċ | À | Α | A | A |
| Urea | Α | Α | Α | С | Α | Α | Х | Α | Α |
| Vinegar | Α | Α | Α | Α* | Α | С | Α | Α | Α |
| White liquor (acid) | С | Α | Χ | X | A X | A | Α | Α | Α |
| Xylene (xylol) | Α | Α | Α | С | С | Α | Α | Α | С |
| Zinc chloride | A | A | À | ΙĂ | Ă | ΙÀ | A | C | Ä |
| Zinc sulfate | Â | Â | Â | Ä* | ΙÀ | ΙÀ | A | Ă | ΙÂΙ |
| | ٠, | ٠, | ٠, | L / ' | ٠, | L '\ | ٠, | ٠, | ٠, |

SERIES 'HP' | HAND DISPENSING PUMP

2900 MacArthur Blvd. Northbrook, IL. USA 60062 www.serfilco.com (800) 323 - 5431

For dispensing of small quantities.



| MODEL | PRICE CODE NO. | | | |
|-------|-------------------|--|--|--|
| PH10 | 56-0000A | | | |

PLASTIC SYPHON PUMP

All polyethylene construction. Hand operated bellows. Fits 5-gal. cans, bottles or drums. Ideal for mildly corrosive fluids at ambient temperatures. Top vent cap is syphon breaker. 16" long tube, 21" long hose.

PLASTIC SYPHON PUMP

| 4A | 56-0011C |
|----|----------|
| | |

All polyethylene. Hand operated bellows and flexible discharge tube will syphon to a lower or pump to a higher level. For dispensing mild acids, caustics, light oils, waxes and disinfectants at ambient temperatures. Top vent cap is syphon breaker, 2" IPS threaded male adapter. 33" long tube, 46" long hose. For 15, 30 and 55 gal. drums. 5 GPM. Wt. 1 lb.

PLASTIC PISTON PUMP

| В | 56-0003 |
|---|---------|
|---|---------|

Constructed of polyethylene and polypropylene. Threads onto 2" and 3/4" NPT drum opening. With adjustable suction tube. For 15, 30 and 55 gal. drums.

ROTARY METAL PUMPS

Effortless syphon flow after priming with several turns. For 15, 30 or 55 gal. drums. Ideal for detergents and light oils. Pumps 6 GPM at 60 turns per min. 2" IPS threaded male adapter. Features Buna N gaskets.

Syphons 4 GPM after priming; Pumps 6 GPM @ 60 RPM. Cast iron. Wt. 14 lbs., 52" Pumps 15 GPM @ 60 RPM.

SC25 56-0005A

Aluminum. Wt. 14-1/2 lbs., 53"

LP32 56-0022

MUST BE WORN. METAL PISTON PUMPS

PROTECTIVE APPAREL

Fits 15, 30 and 55 gal. containers. Includes 2" IPS threaded male adapter. Pumps 8 oz. on each upstroke.

316 stainless steel and PTFE for alkalies, mild acids.

316SS 56-0175

Chrome plated steel with polyethylene for non-corrosives, soaps, disinfectants.

146C 56-0010

OPTIONAL

GROUND-BOND CABLE KIT

For use with metal pumps and containers to prevent static discharge. When pumping flammable or combustible liquids from one container to another, both containers must be effectively bonded and grounded to prevent discharge of sparks of static electricity which could cause explosion and bodily harm.

| DESCRIPTION | PRICE CODE NO. |
|---|----------------|
| 2 ground cables, 6' long with clamps 1 bond cable, 10' long with clamps 1 ground cable, 1' long with clamp for drum | 55-0247 |