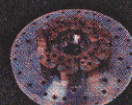
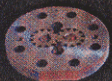
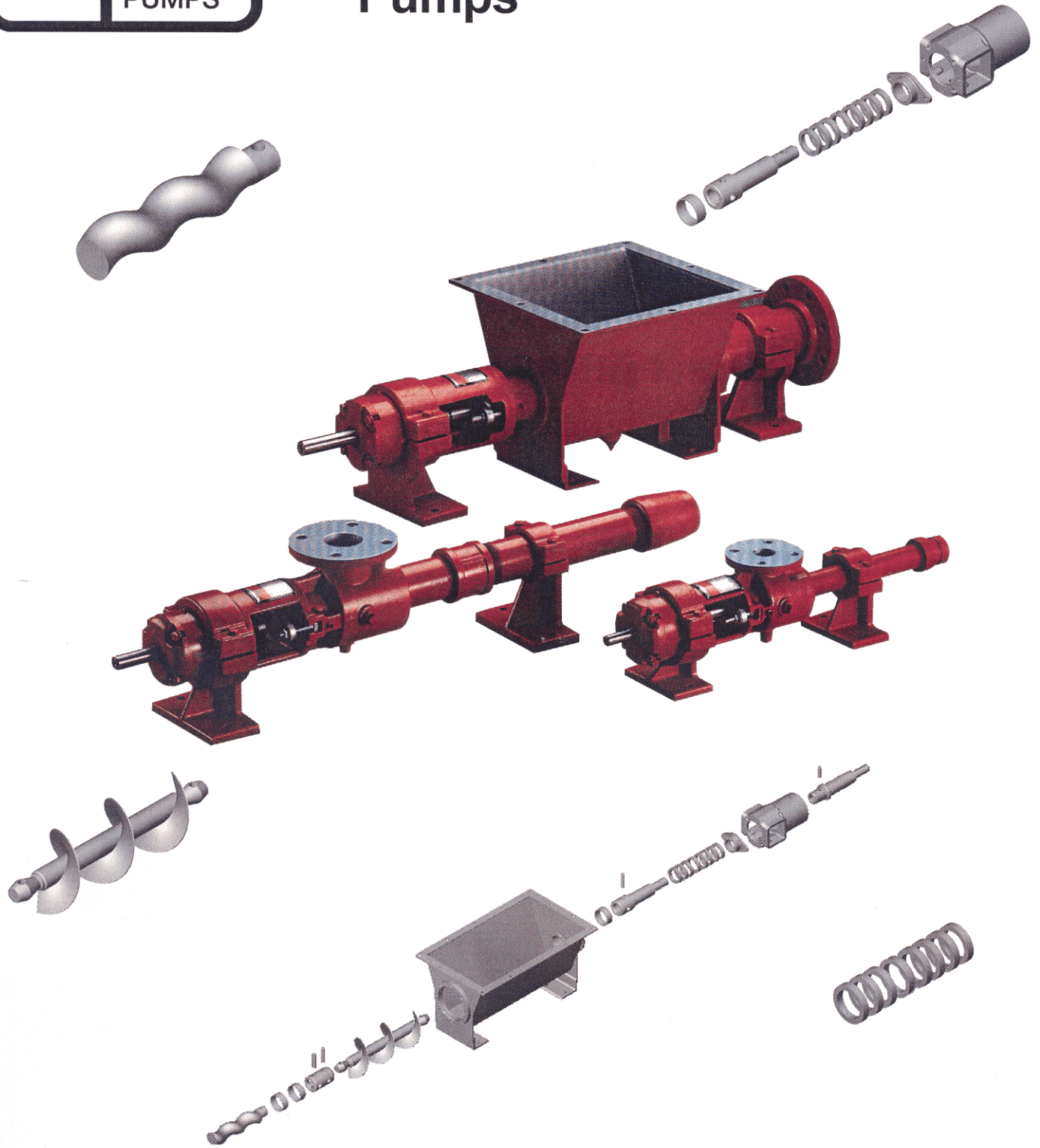
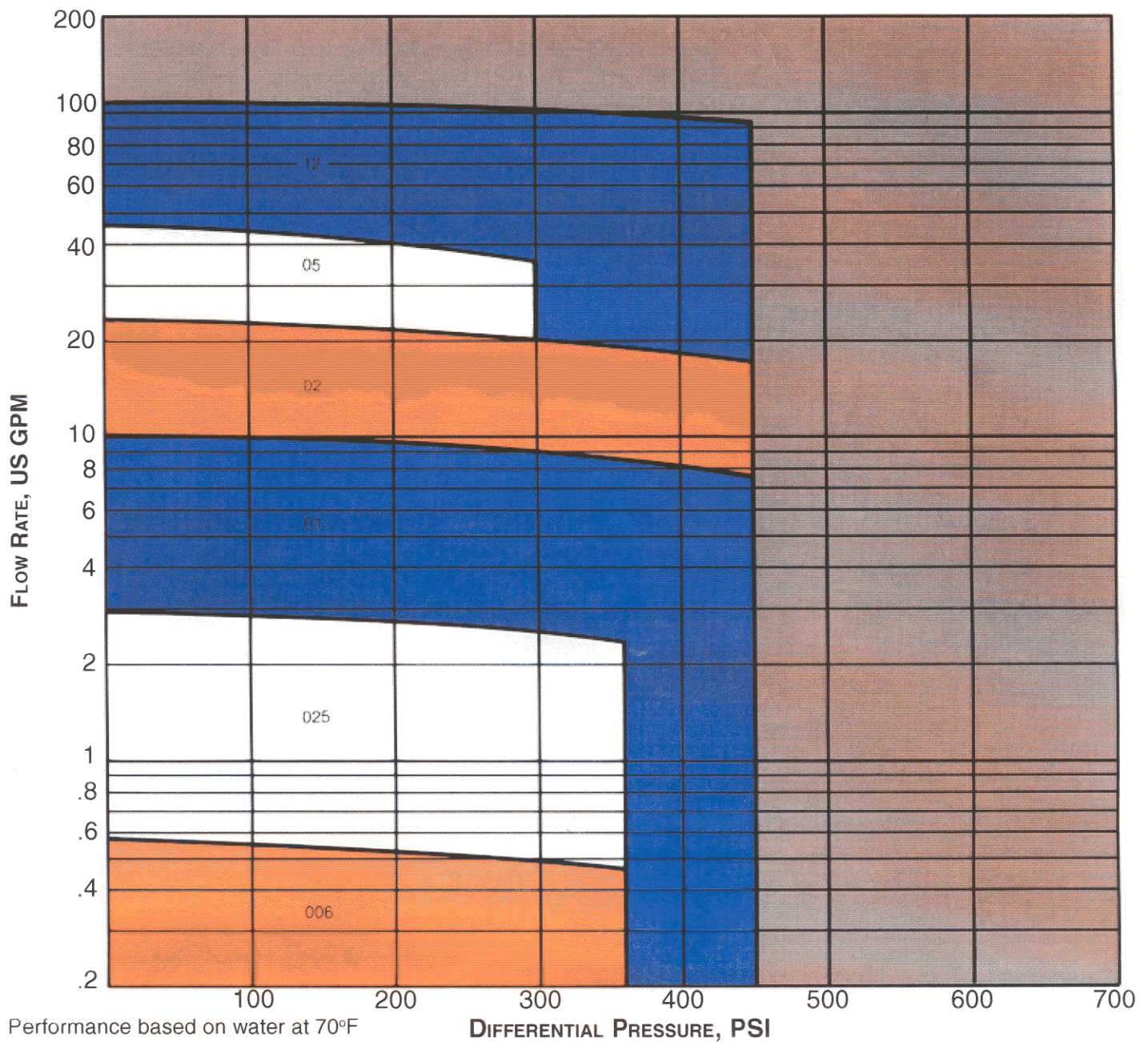




# Progressing Cavity Pumps





## Element Performance Chart

### Roper Pumps Are Made Right

Since our rotors, stators, drive shafts and drive end assemblies can be altered to suit different conditions, you can select the exact design for almost any application.

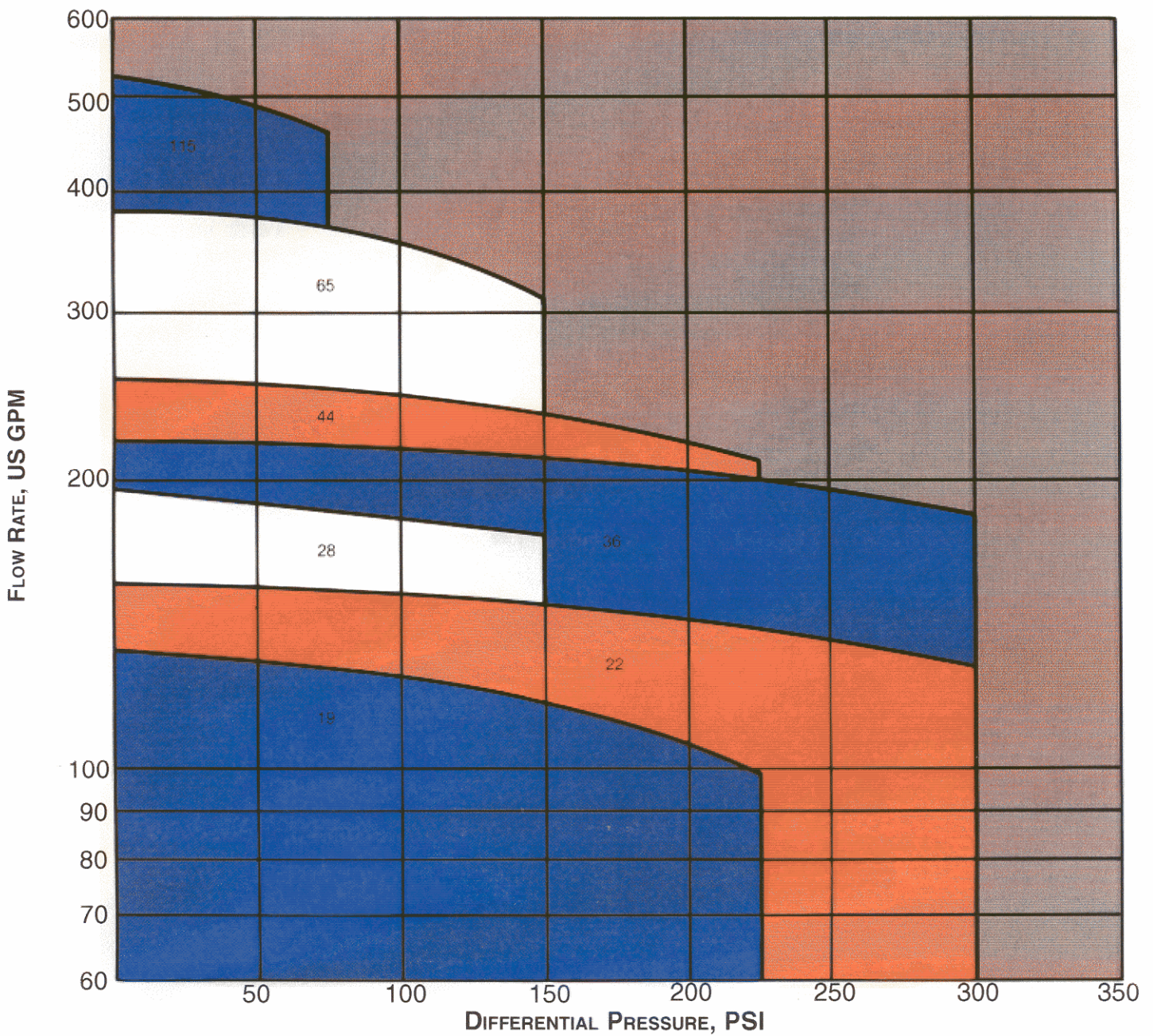
Rotors are made of hard chrome-plated hardened alloy steel, for maximum abrasion resistance, or hard chrome-plated 316 stainless steel, for corrosion and abrasion resistance.

The stators are made of four basic elastomers:

- (1) Buna-N to 185°F
- (2) Soft natural rubber to 185°F
- (3) EPDM to 300°F
- (4) Fluorelastomer to 300°F
- (5) High Performance (HP) rubber to 400°F

Like the rotors, our housing assemblies are available in two metals: cast iron, for applications where the material being pumped is non-corrosive, or 316 stainless steel, to minimize corrosion and contamination.

Our Roper Pumps Application Engineers understand that selecting the right pump requires complete knowledge of both the material to be handled and the overall operating conditions. That's why we developed our own computer-based pump selection program and why we offer a free fluid analysis to help determine which Roper Pumps progressing cavity pump is right for your application. So if you have any questions, feel free to call on your Roper Pumps Application Engineer to make specific recommendations for your particular pumping problem. Of course there's no obligation.



### Roper Pumps Series Model Number System

- The first number (7) indicates the pump series.
- The second number (71, 72, 73) indicates the number of stages of the pumping elements.
- The third number (712, 722, 732) indicates the model.
- The fourth, fifth, and (where appropriate) sixth numbers indicate the approximate theoretical capacity in gallons per 100 revolutions as shown in the chart below.

|                       |     |     |    |    |    |    |    |    |    |    |    |    |     |
|-----------------------|-----|-----|----|----|----|----|----|----|----|----|----|----|-----|
| 4th, 5th, 6th Numbers | 006 | 025 | 01 | 02 | 05 | 12 | 19 | 22 | 28 | 36 | 44 | 65 | 115 |
| Capacity GPM/100 Rev. | .06 | .25 | 1  | 2  | 5  | 12 | 19 | 22 | 28 | 36 | 44 | 65 | 115 |

- The next three letters indicate the materials of construction. See the following chart.

|           | Letter Key | Materials                      |
|-----------|------------|--------------------------------|
| Pump Body | G          | Cast Iron                      |
|           | N          | 316 Stainless Steel            |
| Internals | H          | Hard Chrome Plated Alloy Steel |
|           | N          | Hard Chrome Plated 316 SS      |
| Stator    | L          | Buna-N                         |
|           | M          | Soft Natural Rubber            |
|           | C          | EPDM                           |
|           | V          | Fluoroelastomer                |

The above are Roper's standard construction materials. If you need special materials, just ask the Roper Pumps factory.

### MODEL IDENTIFICATION

**Example:** 72212 GHM

This is a 70200 series pump that has pumping stages and pumps approximately 12 GPM at 100 RPM. The body is cast iron, the rotor is hard chrome-plated alloy steel and the stator is soft natural rubber.

# Options and Accessories for Roper Progressing Cavity Pumps

## Baseplates and Drives

Thanks to our factory fabrication facilities, you can specify Roper progressing cavity pump factory mounted on Roper design structural steel baseplates, complete with V-belts, gear motors and drives. The bases themselves are custom designed for structural integrity, safety, and Roper's traditional long service life. They can be manufactured with or without drip rims, as well as with grout holes. Roper builds its bases for each pumping application, designing them specifically for piggyback, "L" frame and direct-drive units. You can purchase a base package separately or have it incorporated into a complete package with the pump and drive. Every baseplate-mounted pump and each pump coupled to a drive is supplied with safety guards, too.

Roper offers a wide variety of drives, including electric, gas, or diesel engine drives, variable-speed mechanical, electrical (AC or DC) or hydraulic drives for maximum versatility. You can turn to Roper's experienced engineers to help you determine the most practical, economical drive method for your particular pump.

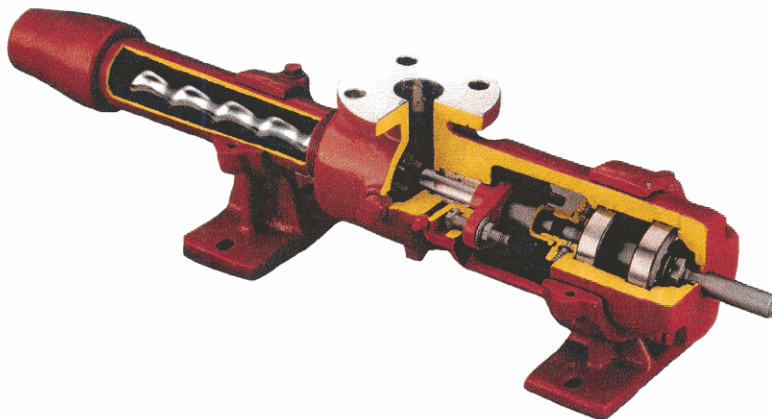
NOTE: Roper designed baseplates must be specified by customer.

## Mechanical Seal Arrangements

Roper offers a selection of mechanical seals to help you deal with hard-to-handle fluids. Available arrangements include double and single seals in both general-purpose and hard-faced construction. You also have a choice of inside or outside mounting. For abrasive or corrosive fluids, mechanical seals can be specified in a variety of material combinations.

## Spare Parts

At Roper, we always maintain a complete line of quality-built, competitively priced spare parts to make sure our progressing cavity pumps will always be the ultimate in long-term dependability.



## Typical Applications for Roper Progressing Cavity Pumps

|                         |                          |                      |                        |                            |
|-------------------------|--------------------------|----------------------|------------------------|----------------------------|
| Carbon Black Slurry     | Aqueous Ammonia          | Varnish              | Lapping Compound       | Bunker C Fuel Oil          |
| Butadiene-Styrene Latex | Benzene                  | Potassium Hydroxide  | Polyvinyl              | Coolant                    |
| Foam Rubber             | Black Liquor             | Sea Water            | Polyvinyl Acetate      | Coolant Oil                |
| Latex                   | Brine                    | Sodium Hydroxide     | Bentonite Clay & Water | Crude Oil                  |
| Neoprene                | Calcium Carbonate        | Titanium Dioxide     | Ceramic Glaze          | Grease                     |
| Polyethylene Slurry     | Carboxy Methyl Cellulose | Turpentine           | Enamel                 | JP4 and JP5 Jet Fuel       |
| Rubber Cement           | Caustic                  | Urea Formaldehyde    | Liquid Silica          | Kerosene                   |
| Talc & Soapstone        | Citric Acid Slurry       | Vinegar & Hard Cider | Paper Coating          | Slop Oil                   |
| Grease Scum             | Detergent                | Asphalt Emulsion     | Paper Pulp             | Petroleum Jelly            |
| Lime Slurry             | Dilute Hydrochloric Acid | Caulking Compound    | Starch                 | Animal Blood               |
| Plant Sewage            | Dye                      | Cement & Sand        | Ammonia Paste          | Animal Fat                 |
| Raw and Digested Sludge | Epoxy Resin              | Grout                | Glue                   | Coal Fines                 |
| Raw Sewage              | Fertilizer               | Gypsum               | Linoleum Adhesive      | Glycerine                  |
| Sulphuric Acid          | Fiberglass Resin Binder  | Mineral Wool Slurry  | Plywood Glue           | Palm Oil or Cottonseed Oil |
| Phosphoric Acid         | Gelatin                  | Perlite              | Seam Paste             | Plating Solution           |
| Acetone                 | Iron Oxide               | Plaster              | Water Glass            | Fruit Pulp                 |
| Alum                    | Liquid Phosphorous       | Slaked Lime          | Drilling Mud           | River Mud                  |
| Alumina Oxide           | Magnesium Hydroxide      | Starch               | Soap Stock             | Tobacco & Water Slurry     |
| Ammonium Hydroxide      | Mercury                  | Stucco               | Polymers               | Wax & Polish               |
| Ammonium Nitrate        | Organic Salt             | Grinding Compound    | Paints                 | Etc...                     |