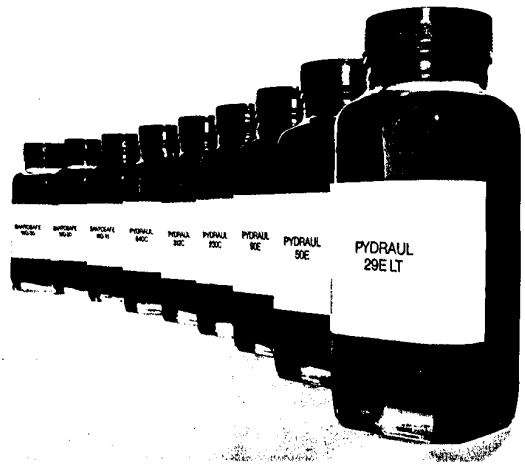
The "Guide." It makes fire-resistant fluids easier to select.



Our new 36-page "guide to fire-resistant hydraulic fluids" contains all the facts and figures you need to buy hydraulic fluids intelligently.

In it, you'll find physical property charts, applications information, viscosity/temperature charts, pump test results, change-over and conversion data, seals and packing information, recommended filters and hoses, and reclamation data.

The guide will help you whether you want to "step-up" to improve performance or "step-down" to reduce costs.

Take your choice.

Monsanto offers a wide range of fire-resistant hydraulic fluids. They come in three types.

The "blue" Pydraul® E series are our top-of-the-line straight synthetic fluids. They offer premium performance and fire-resistant properties.

The "green" Pydraul C series are our synthetic blends. They offer excellent fluid properties at a lower cost.

The "red" Santosafe® W/G series are our water/glycols, the most economical fluids in the line.

Man in the white hat.

With one exception, everything you need to make the optimum hydraulic fluid choice can be found in the "guide."

The one exception is the Monsanto technical representative, the "man in the white hat."

After you have made the preliminary selection, your Monsanto representative will be glad to give you the benefit of our broad experience with hydraulic fluid applications.

He will double-check your selection and suggest alternatives in case you are uncertain about the best series or type for your machines.

If problems develop.

Sometimes, in spite of everything, unexpected problems occur. If so, Monsanto can help. In St. Louis, we have a laboratory and testing facility for fire-resistant hydraulic fluids second to none.

If problems develop, we can simulate plant conditions on equipment such as our "Green Monster," a huge pump test stand for carrying out a variety of different tests under varying conditions.

Equipment like the Green Monster can help pinpoint the problem in your application. And once he knows the problem, your representative can suggest an alternate fluid.

What it all adds up to.

The Guide, the White Hat and the in-depth Technical Service: Three big reasons for doing your fire-resistant hydraulic fluid business with Monsanto.



Monsanto Company
Dept. B2S
800 N. Lindbergh Blvd.
St. Louis, Mo. 63166

Please send me a copy of your 36-page "guide to fire-resistant hydraulic fluids."

Name_____
Company_____
Address_____
City and State_____ Zip_____

Monsanto
We never rest on our fluids.

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Polynodic™ Programs.

New Answers to Environmental Regulations!

If, like most companies, you're planning ahead for the increasingly stringent regulations for wastewater discharge, you need a cooling water treatment program that depends upon chemicals which are ecologically acceptable.

The new Polynodic Programs are the answers to such restrictions. These treatments contain no chromates. Some have also eliminated zinc. And others function without phosphate.

BUT—you get the same excellent control of corrosion and scaling you obtained with the dependable chromate treatments.

What is the BETZ Polynodic concept?

Broadly speaking, it's a reverse approach to corrosion and scale control. The traditional approach has been to keep the pH low enough to prevent scaling. Then treat the circulating water to inhibit corrosion.

The Polynodic concept reverses this. We maintain the pH of the water at 7.5 to 9.0. At this level, the corrosive tendency of the water is much less, and not as difficult a problem to control. Then we deal with the major problems of scaling through the use of dispersants.

Only a few years ago, this approach would have been impossible, except for isolated cases where the water was almost devoid of hardness salts. At such a high pH, a buildup of heavy scale would have resulted.

Then came deposit control agents, an important breakthrough in industry technology. And now it's possible to operate in this high pH range.

How does a Polynodic treatment work?

For corrosion control, pH must stay in the 7.5 to 9.0 range. To keep scale and deposition from forming at this high pH level, a BETZ deposit control agent is used. It may be any one of several, depending on the specific Polynodic formulation. This prevents precipitation of calcium carbonate and/or tricalcium phosphate.

Corrosion is controlled by blending into the formulations polymers and various organics, including azoles and various acrylates. These agents put a complex passive film on anodic sites. In some cases, depending on the formulation, a polymeric film forms on the metal surfaces.

BETZ Polynodic formulations also turn a traditional enemy into a friend. They complex with the natural calcium in the water. Cathodic protection results.

Overall protection with these formulations ranges from very good to excellent. Corrosion rates are held in the range of 0.5 to 4.0 mils per year (mpy).

To put a BETZ Polynodic Program to work for you, call your nearest BETZ field office. Or call 215 · 355-3300 and talk your problem over with one of our headquarters engineers.

◀ Test coupons offer a dramatic comparison of results: (left) no treatment; nonchromate treatment without a dispersant, and a BETZ nonchromate inhibitor/dispersant program. The latter is one of the formulations in the BETZ Polynodic treatment program.

BETZ®

TREVOSE, PENNSYLVANIA 19047

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IN CANADA: BETZ Laboratories Ltd/Ltee

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