

DuBois

OIL SYSTEM CLEANER

Step One Oil Soluble Cleaner

Description

Step One is a powerful, solvent free, in-process, oil-soluble cleaner specifically formulated to remove varnish, carbon, sludge, and small amounts of water from petroleum and synthetic PAO oil systems. The Step One product contains a blend of detergents that target tenacious carbon and varnish deposits. It also contains ingredients that tie up free floating particulates and water. This allows for effective removal of these containments from the system with a simple oil change.

Key Properties

- In-process, cleans while your equipment works, eliminating costly downtime
- Completely oil-soluble, works with existing oil
- Clean systems reduce friction and thus power requirements, lowering operating cost
- Clean systems help to ensure that lubrication is carried effectively to critical components, lowering likelihood of costly mechanical failure
- Contains powerful rust inhibitors to ensure oxidation protected clean surfaces
- Very cost effective at only 5 to 10% usage
- Eliminates the need for harsh costly solvent based cleaners
- Prolongs oil life, eliminating contamination of fresh oil by dirty system

Technical Data *Characteristics (ASTM typical results)*

ISO Grade: 100, SAE Grade: 30, Viscosity: D-445, 100° F: SUS 547, 210° F: SUS 60, Flash Point: D-92 315, Mild Odor

Use Instructions

The Step One cleaner is designed for use as an additive at 5% to 10% concentration in oil, to clean: Hydraulic Systems, Gearboxes, Automatic and Manual Transmissions, Air Compressors, Bowser Sumps in Paper Mills, Vacuum Pumps, Chains, Bearings, Reservoirs, Air Line Valves and Heat Transfer Systems.

Not for Ammonia Compressors.





Step One

Use Instructions

1. Use 5% to 10%, generally 5%, of the Step One product with 90% to 95% of the fluid in the system.

2. Temperature - time - concentration relationships for industrial equipment: (Oil should be circulating.)

Concentration	5%	10%
Temperature	Room Temp.	Room Temp.
Time	3-4 Days	1-2 Days
Temperature (Ideal)	160°F	160°F
Time	1-2 Days	24 Hours
Temperature (Max.)	300°F	300°F
Time	4 Hours	2 Hours

3. Run equipment at normal operating conditions. Do not exceed 300°F.

4. Change the oil filter before and after cleaning. Inspect during cleaning if equipment is very dirty. Some filters are equipped with pressure drop gauges. Normally, 10 psi drop indicates the filter should be changed.

5. For safety reasons allow oil to cool (130° F max) before draining.

6. After draining, it is recommended that the oil system be flushed with a clean, thin oil (100 second paraffin oil) or DuBois MPO-10. To flush, fill to minimum or normal oil level. Start equipment to circulate or splash oil around system. In gearboxes or other applications where a heavy oil is normally used, stop equipment almost immediately after starting, to prevent wear. For screw-type air compressors, flushing oil can be circulated for about 1 hour.

Product Compatibility

Step One cleaner is safe for use on ferrous and nonferrous metals used in industrial equipment. It is safe on most seals used in industrial equipment at 10% maximum concentrations.

Test Method

Titration of Step One or oil blends of Step One for TAN can be done by conventional methods or ASTM D-974.

Safe Handling and Storage Instructions

Keep container closed when not in use. Store drums on their side to prevent water contamination. Store pails upright and covered. Store inside above 32°F.

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Please refer to the label and Material Safety Data information for all warnings, recommendations for safety equipment, and other regulatory information.