

TECHNICAL DATA SHEET

HOUGHTO-SAFE® 1120

PHOSPHATE ESTER TYPE FIRE RESISTANT HYDRAULIC FLUID

HOUGHTO-SAFE® 1120 is a phosphate ester fluid that is approved for operation in most types of pumps and associated hydraulic components. HOUGHTO-SAFE® 1120 combines fire resistance with excellent lubricating properties. HOUGHTO-SAFE® 1120 is Factory Mutual approved. HOUGHTO-SAFE® 1120 is made from triaryl phosphate ester plus corrosion and oxidation inhibitors. These inhibitors extend the fluid service and insure maximum hydraulic circuit component life with lower maintenance costs.

HOUGHTO-SAFE® 1120 can be used at elevated temperatures up to 150°F, but for optimum fluid life we recommend a reservoir temperature of 120°F. Many years of field experience confirm that HOUGHTO-SAFE® 1120 excels in fire resistance, component lubrication, thermal stability, and corrosion prevention.

HOUGHTO-SAFE® 1120 is compatible with all metals common to hydraulic power circuits that include all steel, cast iron, copper, bronze, brass, zinc, cadmium, aluminum and magnesium metals. HOUGHTO-SAFE® 1120 is compatible with the following elastomers: butyl, ethylene propylene, viton, silicon and chlorinated polyethylene.

HOUGHTO-SAFE® 1120 is not compatible with water containing fluids such as water glycols, water in oil emulsion and high water content fluids. All standard filtration techniques are satisfactory with HOUGHTO-SAFE® 1120. Blotter type filter elements will remove water contamination. Activated earth or alumina can be used to reclaim degraded or contaminated fluid.

Applications

HOUGHTO-SAFE® 1120 was designed to replace mineral oil based hydraulic fluid. HOUGHTO-SAFE® 1120 can be used in or near fire hazards applications without compromising the overall hydraulic system operation.

Recommendation for Use

HOUGHTO-SAFE® 1120 can be used in equipment designed for traditional mineral oil in applications where a fire hazard exists.

Benefits

- Factory Mutual Approved as a fire resistant hydraulic fluid that protects personnel and property from accidental fire and may lower insurance premiums
- Fluid has an inherently low Total Acid Number that resists oxidation
- Contains additives to enhance oxidation stability that will extend service life
- Hydrolytically stable to resist degradation when water contamination is present

Health, Safety and Handling

Please consult the Safety Data Sheet (SDS) for information on storage, safe handling and disposal. The conditions or methods of handling, storage, use and disposal of the product are beyond our reasonable control - we assume no liability for any ineffectiveness of the product or any injury or damage, arising out of or in connection with these conditions.



Properties

PROPERTY	TYPICAL VALUE	UNIT
Appearance	Clear green mobile fluid	
Viscosity at 45°F	4000 866	SUS cSt
at 100°F	230 49.6	
at 210°F	44 5.4	
ISO Grade	46%	
Total Acid Number	0.2 max	mg KOH/g
Specific gravity, at 60°F	1.147	
Pounds per Gallon	9.4	
Flash Point	455	°F

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