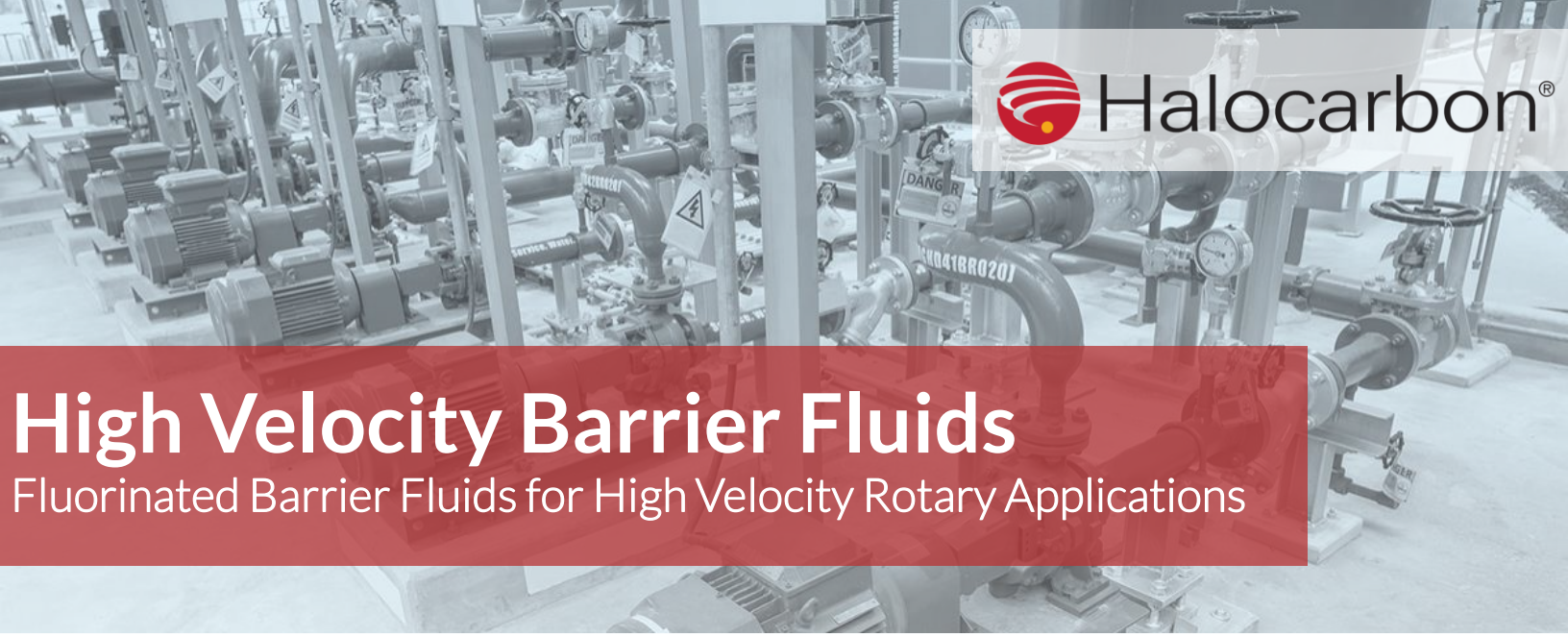


High Velocity Barrier Fluids

Fluorinated Barrier Fluids for High Velocity Rotary Applications

MSHV04 & MSHV06

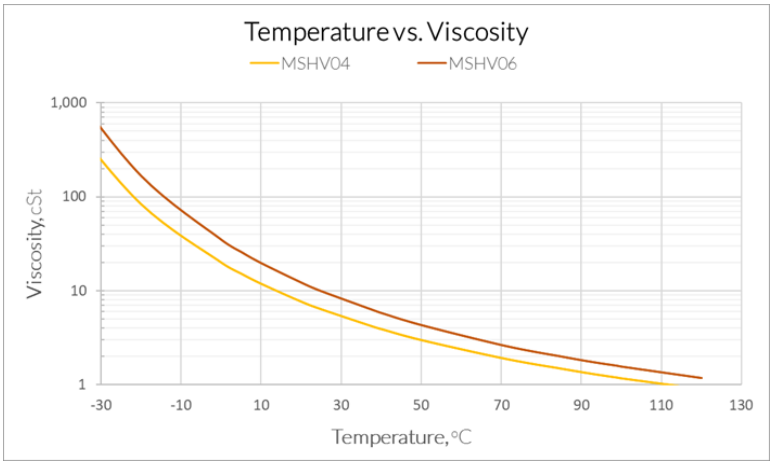
Halocarbon Mechanical Seal High Velocity Barrier Fluids are fluorinated fluids specifically engineered for use in dual and tandem sealing systems for centrifugal and rotary pumps employed in multiple industries like petroleum, natural gas, and chemical manufacturing. These fluids are typically used in equipment where the rotational velocity of the shaft approaches 1,200 to 3,600 rpm's. Under these demanding operating conditions, the need to properly lubricate and cool the mechanical seal face, while also preventing hazardous process fluid leaks is of the utmost importance.

Designed with Your Needs in Mind

In order to provide the superior safety and reliability of all Halocarbon products to industries utilizing centrifugal and rotary pumps in hazardous operations, Halocarbon has formulated two low viscosity PCTFE oils, MSHV04 and MSHV06, to provide excellent lubrication and the necessary cooling for mechanical seals used in applications with lower operating temperatures.

These fluids can be used in both pressurized and unpressurized systems that typically employ API 682 Plan 52, Plan 53A, B, & C and Plan 54 seal arrangements.

MSHV04 and MSHV06 Barrier Fluids are both available either with or without a corrosion inhibitor.



Safe, Reliable and Long-Lasting Performance

Halocarbon Mechanical Seal Barrier Fluids are intrinsically nonflammable and nonreactive. Unlike glycol-, alcohol-, hydrocarbon-, mineral oil-, or silicon-based barrier fluids, Halocarbon Mechanical Seal Barrier Fluids are chemically inert, making them ideally suited for use in applications that involve strong acids or bases, flammable solvents, hydrocarbons, corrosive chemicals, strong oxidizers, and reactive gasses.

Key Performance Characteristics

- Safe to handle, nontoxic
- Nonflammable
- Low temperature fluidity
- High thermal stability
- No Flash Point
- No Autoignition Point
- Clean, no sludge formation
- Compatible with most metals, plastics, and elastomers
- Good heat transfer properties
- Excellent sealing and lubricating properties

Properties	Units	MSHV04	MSHV06
Kinematic Viscosity *ASTM D445*			
@ -20 °C (-4 °F)	*cSt*	83.7	168
@ 0 °C (32 °F)	*cSt*	20.1	35.2
@ 40 °C (104 °F)	*cSt*	3.90	5.80
@ 100 °C (212 °F)	*cSt*	1.18	1.57
Vapor Pressure @ 40 °C *ASTM D2879*	*torr*	0.5	0.4
Density @ 25 °C *ASTM D4052*	*g/cm³*	1.87	1.89
Thermal Conductivity *(W/m*K)* @ 25 °C *ASTM D2717*		0.065	0.065
Specific Heat *(J/(g-K))* @ 40 °C *ASTM E1269*		1.0	1.0
Pour point *ASTM D97*	*°C (°F)*	-73 (-99)	-71 (-96)
Initial Boiling Point	*°C (°F)*	~200 (~392)	~200 (~392)

Let's create your next **BREAKTHROUGH™**

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