

Low Velocity Barrier Fluids

Fluorinated Barrier Fluids for Low Velocity Rotary Applications

MSLV27 & MSLV56

Halocarbon Mechanical Seal Low Velocity Barrier Fluids are designed for use in dual and tandem sealing systems for rotary agitators and mixers employed in reactive chemical processes. This type of equipment is typically mounted vertically on a chemical reactor, where the vertical shaft rotates at lower velocities (typically 150 rpm to 300 rpm) and contains mechanical seals with a wider diameter and larger surface area seal faces. Under these less demanding operating conditions, the cooling of the seal face is of less importance relative to environment-side or process-side leakage.

Designed with Your Needs in Mind

To address the challenges of chemical operations utilizing rotary agitators and mixers, Halocarbon has formulated two medium viscosity PCTFE oils, **MSLV27** and **MSLV56**, to provide a low-leakage barrier fluid solution that is also suitable for use at higher operating temperatures to minimize the effects of blistering on the mechanical seal face. These fluids also provide the same lubrication and cooling capabilities as all Halocarbon products.

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.

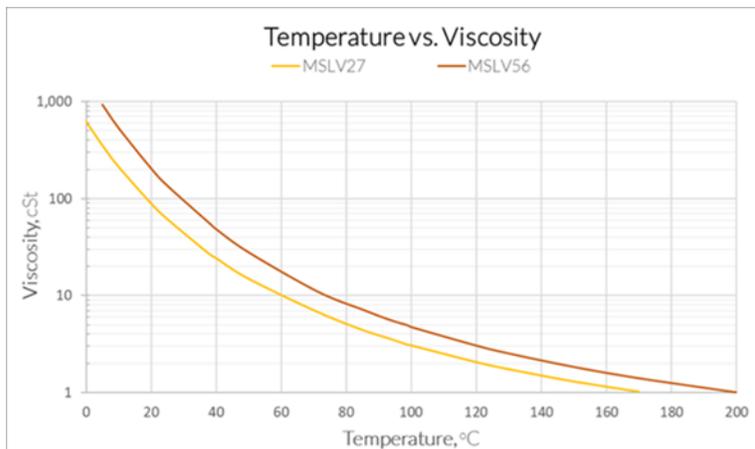
MSLV27 and MSLV56 Barrier Fluids are both available either with or without a corrosion inhibitor.

Safe, Reliable and Long-Lasting Performance

All 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	MSLV27	MSLV56
Kinematic Viscosity <i>ASTM D445</i>			
@ 0 °C (32 °F)	cSt	625	1,720
@ 40 °C (104 °F)	cSt	24.3	48.2
@ 100 °C (212 °F)	cSt	3.06	4.72
@ 150 °C (302 °F)	cSt	1.30	1.83
Vapor Pressure @ 40 °C <i>ASTM D2879</i>	torr	0.013	0.010
Density @ 25 °C <i>ASTM D4052</i>	g/cm ³	1.92	1.94
Thermal Conductivity (W/m*K) @ 25 °C <i>ASTM D2717</i>		0.072	0.072
Specific Heat (J/(g-K)) @ 40 °C <i>ASTM E1269</i>		1.0	1.0
Pour point <i>ASTM D97</i>	°C (°F)	-40 (-40)	-34 (-29)
Initial Boiling Point	°C (°F)	~255 (~491)	~290 (~554)

*Let's create
your next*
BREAKTHROUGH™

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