

TECHNICAL DATA SHEET

Barrier XL

Extended Life Synthetic Barrier Fluid · 188 Series

Barrier XL is a synthetic barrier fluid that provides excellent lubrication and cooling for mechanical seals. It is manufactured to the highest possible standards, undergoing a thorough filtration process to ensure an extremely clean formulation that protects seals from damaging abrasive materials.

This advanced formulation uses synthetic base stocks and liquid additives that ensure excellent thermal stability and superior cold-temperature properties, allowing Barrier XL to be used over a very wide temperature range. The additives protect the fluid from oxidative degradation and protect metal surfaces from corrosion, providing extended fluid life even in applications operating without a protective nitrogen blanket.



APPLICATIONS

- Buffer / barrier fluid for mechanical seals

BENEFITS

- Excellent thermal stability
- Excellent oxidative stability
- Protects against corrosion and rust
- Highly filtered with excellent ISO cleanliness (14/13/11)
- Meets H2 Food Grade requirements
- Superior low-temperature fluidity
- Resists water contamination and separates readily from water

TECHNICAL SPECIFICATIONS

Typical properties

Product Name	Barrier 5XL	Barrier 17XL	Barrier 30XL	Barrier 46XL	Barrier 60XL
Viscosity @ 40 °C (cSt)	5.4	17.4	30.7	46.4	64.0
Viscosity @ 100 °C (cSt)	1.7	3.9	5.8	7.8	10.3
Viscosity Index	66	119	134	137	149
Specific Gravity @ 15 °C	0.80	0.82	0.83	0.83	0.84
Pour Point (°C)	-60	-66	-63	-57	-57
Flash Point (°C)	158	224	245	262	278
Initial Boiling Point (°C)	298	336	382	>400	>400

VISCOSITY, DENSITY & HEAT CAPACITY

Temp °C	Barrier 5XL			Barrier 17XL			Barrier 30XL			Barrier 46XL			Barrier 60XL		
	cSt	kg/L	J/g·K	cSt	kg/L	J/g·K	cSt	kg/L	J/g·K	cSt	kg/L	J/g·K	cSt	kg/L	J/g·K
-40	262	0.838	1.90	2704	0.859	1.92	7985	0.867	1.90	19352	0.871	1.90	39322	0.871	1.95
-20	57.3	0.823	1.98	544	0.845	1.99	1380	0.853	1.97	2595	0.857	1.97	3495	0.858	2.00
0	20.0	0.809	2.05	117	0.830	2.05	256	0.838	2.05	442	0.842	2.04	612	0.845	2.07
20	9.4	0.794	2.13	39.2	0.815	2.12	75.8	0.823	2.12	122	0.827	2.12	169	0.833	2.13
40	5.4	0.780	2.20	17.4	0.801	2.19	30.7	0.809	2.19	46.4	0.813	2.19	64.0	0.820	2.21
60	3.4	0.765	2.28	9.4	0.786	2.26	15.4	0.794	2.27	22.2	0.798	2.26	30.2	0.808	2.29
80	2.4	0.751	2.35	5.8	0.771	2.33	9.0	0.779	2.34	12.4	0.783	2.33	16.6	0.795	2.37
100	1.7	0.736	2.43	3.9	0.757	2.39	5.8	0.765	2.42	7.8	0.769	2.40	10.3	0.783	2.45
120	1.4	0.722	2.50	2.8	0.742	2.46	4.1	0.750	2.49	5.3	0.754	2.48	6.9	0.770	2.54
140	1.2	0.707	2.58	2.2	0.727	2.53	3.1	0.735	2.56	3.9	0.739	2.55	5.0	0.758	2.63
160	1.0	0.693	2.66	1.7	0.712	2.60	2.4	0.720	2.64	2.9	0.724	2.62	3.8	0.745	2.73
180	0.8	0.678	2.73	1.4	0.698	2.67	1.9	0.706	2.71	2.3	0.710	2.69	3.0	0.733	2.82
200	0.7	0.664	2.81	1.2	0.683	2.73	1.6	0.691	2.79	1.9	0.695	2.76	2.4	0.720	2.92

NOTE

Values in this Technical Data Sheet are typical and do not constitute a specification. Manufacturing specifications are available on request. Routine fluid analysis is recommended to assess the in-service condition of the fluid. Specifications are subject to change due to formulation or raw-material updates; always verify that this TDS is the most current version.