

**CLARION® SYNBAR® FLUIDS**

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Date 1/09

**DESCRIPTION:** Clarion SynBar Fluids are formulated using premium synthetic-base fluids and additive systems to perform in mechanical seals where superior lubrication and cooling properties are a must to promote seal longevity. An enhanced additive system was designed to promote the natural properties of the polyalphaolefin base stock and to meet the special requirements for mechanical seals.

**QUALITIES:** Clarion SynBar Fluids:

- Are formulated to minimize system impurities and reduce catalyst poisoning.
- Have excellent low temperature fluidity and high temperature stability to cover a wide service temperature range.
- Are compatible with commonly used seal materials.
- Are formulated with additives and base stocks to meet incidental food contact applications and meets U.S. FDA regulation 21 CFR 178.3570 requirements.
- Are registered as NSF H1 lubricants (formerly USDA H1) for use in food processing plants under the jurisdiction of the USDA.

**APPLICATIONS:** Clarion SynBar Fluids are designed for use in both pressurized and non-pressurized dual mechanical seals manufactured by companies such as JohnCrane, and FlowServe, etc., where a superior buffer/barrier fluid is required.

Clarion SynBar Fluids are recommended for use in mechanical seals found in chemical/hydrocarbon processing, food processing, gas compression, and fluid pumps, etc., where a fluid with its unique properties are called for.

Clarion SynBar 22 can be used in low temperature hydraulic systems as a replacement for Mil-5606 fluids in non-aviation application.

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Date 01/09 - (Continued)

**TYPICAL PROPERTIES:**

**CLARION® SYNBAR® FLUID**

<b>Grade</b>	<b>5</b>	<b>22</b>
Material Code	632505009	632507009
API Gravity, ASTM D 287, °API	45.3	41.0
Specific Gravity	0.8003	0.8205
Density, lbs/gal	6.66	6.83
Viscosity, ASTM D 445, cSt at 40°C	5.17	17.5
cSt at 100°C	1.70	3.96
Copper Corrosion ASTM D 130	1A	1A
Flash Point, ASTM D 92, °F (°C)	316 (158)	420 (216)
Fire Point, ASTM D 92, °F (°C)	345 (174)	489 (254)
Autoignition, ASTM E 659, °F (°C)	662 (350)	664 (351)
Pour Point, ASTM D 97, °F (°C)	-89 (-66)	-86 (-66)
Rust Prevention, ASTM D 665 A (DI Water)	Pass	Pass
ASTM D 665 B (Salt Water)	Pass	Pass
Foam, ASTM D 892, mls		
Sequence I	30/0	0/0
Sequence II	40/0	20/0
Sequence III	45/0	0/0
Brookfield, Viscosity, cP at -40°C	–	2700
Dielectric Strength, ASTM D 877, kv	–	35
Anti-wear Properties, ASTM D 4172		
mm Scar at 20 Kg	0.31	0.29
mm Scar at 40 Kg	0.39	0.35
Thermal Conductivity, ASTM E 1225 <sup>(1)</sup> , K <sup>o</sup>		
BTU/(hr-ft <sup>2</sup> -(F/ft)) at 100°F	0.081	0.085
NSF Registered	H1	H1
FDA 21 CFR 178.3570	✓	✓

(1) Data developed on the Base Stock