

**CLARION® SYNBAR® FLUIDS**

Date 01/10

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 John Crane, 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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TYPICAL PROPERTIES:

CLARION® SYNBAR® FLUID

Grade	5	22
Material Code	632505009	632507009
API Gravity, ASTM D 287, °API	45.0	41.4
Specific Gravity	0.8018	0.8184
Density, lbs/gal	6.677	6.814
Viscosity, ASTM D 445, cSt at 40°C	5.17	18.6
cSt at 100°C	1.70	4.14
Copper Corrosion ASTM D 130	1A	1A
Flash Point, ASTM D 92, °F (°C)	316 (158)	432 (222)
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, Sequence I, II, III	Pass	Pass
Brookfield, Viscosity, cP at -40°C	–	2700
Dielectric Strength, ASTM D 877, kv	–	35
Anti-wear Properties, ASTM D 4172		
mm Scar at 40 Kg	0.42	0.45
Thermal Conductivity, ASTM E 1225 ⁽¹⁾ , K°		
BTU/(hr-ft ² -(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