



# CLARION® Synthetic Gear Fluids

## OVERVIEW



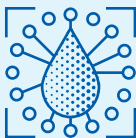
- Provide excellent performance in gear boxes, bearings, blowers, reciprocating compressors, and hydraulic systems where an NSF H1 lubricant is required or desired.
- Provide excellent performance in food and beverage canning machinery.
- Formulated with high-purity synthetic fluids and additives for food processing machinery applications.
- Do not contain any natural products from animals, nuts, or genetically modified organisms (GMOs).
- Suitable for use where vegetarian and nut-free food is prepared.

## FEATURES & BENEFITS



- Colorless, odorless, tasteless, non-staining lubricants.
- Provide excellent wear, rust, and oxidation protection.
- Exceptional heat resistance and low temperature fluidity make them ideal for high and low temperature applications.
- Can lower machinery operating temperatures and energy consumption.
- Meet the requirements of U.S. FDA regulation 21 CFR 178.3570 for incidental food contact.
- NSF H1 registered for use in food processing plants under the jurisdiction of the USDA.

## APPLICATIONS



- Highly recommended for applications where low temperature pumpability is required.
- Designed for use in can seamers such as those made by Angelus Sanitary Can Seaming Company (ISO 150 and 220 only). The ISO 150 is recommended for high speed and the ISO 220 for low speed.
- Recommended for enclosed helical, herringbone, straight, spiral bevel, and spur gears, and bearings operating in food and beverage processing facilities.

## PROPERTIES



## Typical Properties for CLARION® Synthetic Gear Fluids:

ISO Grade	150	220	320
Material Code	632510009	632511009	632512009
Specific Gravity ASTM D1298	0.8459	0.8490	0.8520
Density, lb/gal	7.04	7.07	7.09
Viscosity ASTM D445			
cSt at 40°C	159	228	328
cSt at 100°C	20	26	34
Viscosity Index ASTM D2270	142	145	148
Pour Point, °F (°C) ASTM D97	-54 (-48)	-54 (-48)	-44 (-42)
Flash Point, °F (°C) ASTM D92	529 (276)	532 (278)	540 (282)
Rust Test ASTM D665 A/B	Pass	Pass	Pass
Four-Ball Weld Point, kgf ASTM D2783	160	160	160
Four-Ball Load Wear Index, kgf ASTM D2783	50	50	50
Four-Ball Wear, mm @40 kg ASTM D4172	0.43	0.35	0.35
ANSI/AGMA 9005-E02	4EP	5EP	6EP
FZG Failure Load Stage ASTM D5182	>12	>12	>12
NSF Registered	H1	H1	H1
FDA 21 CFR 178.3570	✓	✓	✓

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