



CLARION® SYNTHETIC GEAR FLUIDS

Date 02/11

DESCRIPTION: Clarion Synthetic Gear Fluids are premium products designed to provide optimum performance in gear boxes, bearings, blowers, reciprocating compressors and hydraulic systems where a H1 product is needed. Clarion Synthetic Gear Fluids were specifically designed for use in food and beverage canning industry machinery. They are formulated with a high-purity synthetic fluids and additive system for food processing applications. They are available in four ISO viscosity grades. Clarion Synthetic Gear Fluids do not contain any natural products derived from animals, nuts or genetically modified organisms (GMOs). They are suitable for use where vegetarian and nut-free food is prepared.

- QUALITIES:**
- Clarion Synthetic Gear Fluids meet the requirements of US Food and Drug Administration (US FDA) regulation 21 CFR 178.3570 for lubricants with the possibility of incidental contact with food for human consumption and are registered as NSF H1 lubricants (formerly USDA H1) for use in food processing plants under the jurisdiction of the US Department of Agriculture (USDA).
 - Clarion Synthetic Gear Fluids are certified as Kosher (Passover) with the Union of Orthodox Jewish Congregations of America®.
 - These lubricants are colorless, odorless, tasteless, non-staining lubricants that provide excellent wear, rust and oxidation protection and have demonstrated the ability to lower power consumption resulting in additional energy savings.

- APPLICATIONS:**
- Clarion Synthetic Gear Fluids are recommended for lubrication of rotary seaming machines, both enclosed and total loss systems
 - Clarion Synthetic Gear Fluids are highly recommended for applications where low temperature pumpability is a must.
 - Clarion Synthetic Gear Fluids ISO 150 and 220 are designed for use in can seamers such as those made by Angelus Sanitary Can Seaming Company. The ISO 150 is recommended for high speed and the ISO 220 for Low speed.

TYPICAL PROPERTIES:

CLARION® SYNTHETIC GEAR FLUIDS

ISO Grade	150	220	320	460
Material Code	632510009	632511009	632512009	632513009
Specific Gravity	0.8459	0.8490	0.8520	0.8545
Density, lb/gal	7.04	7.07	7.09	7.11
Viscosity, ASTM D 445, cSt at 40°C	159	228	328	456
cSt at 100°C	20	26	34	44
Viscosity Index, ASTM D 2270	142	145	148	151
Pour Point, ASTM D 97, °F (°C)	-54 (-48)	-54 (-48)	-44 (-42)	-44 (-42)
Flash Point, ASTM D 92, °F (°C)	529 (276)	532 (278)	540 (282)	530 (276)
Rust Protection, A/B, ASTM D 665	Pass	Pass	Pass	Pass
4-Ball Weld, ASTM D 2596, kgf	160	160	160	160
Load Wear Index	50	50	50	50
4-Ball Wear, ASTM D 4172B, mm Scar at 40kg	0.43	0.35	0.35	0.36
FZG, Failure Stage	>12	>12	>12	>12
NSF Registered	H1	H1	H1	H1
FDA 21 CFR 178.3570	✓	✓	✓	✓