

# CLARION® FOOD MACHINERY GEAR OILS



Date 5/17

**DESCRIPTION:** Clarion Food Machinery Gear Oils are designed specifically for use in food machinery worm gears, spur gears and valves. They are formulated with a high-purity white mineral oil and additive system for food processing applications. They are available in four ISO viscosity grades. They 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 Food Machinery Gear Oils 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 Food Machinery Gear Oils are certified as Kosher (passover) with the Union of Orthodox Jewish Congregations of America (U) and Halal with the Islamic Food and Nutrition Council of America (M).

They are colorless, odorless, tasteless, non-staining lubricants that provide excellent wear, rust and oxidation protection.

**APPLICATIONS:** Clarion Food Machinery Gear Oils are general purpose lubricants for machinery that processes, packages or transports food for human consumption. These oils are recommended for use in food machinery worm gears, spur gears and valves.

Clarion Food Machinery Gear Oil 150 is recommended for lubrication of rotary can seaming machines equipped with a total loss system, such as those made by Angelus Sanitary Can Seaming Company.

Clarion Food Machinery Gear Oil 220 is certified under NSF/ANSI Standard 60: Drinking Water Treatment Chemicals—Health Effects and NSF/ANSI Standard 61: Drinking Water System Components—Health Effects, and is recommended as a lubricant for water well pump and other potable water system applications where an NSF/ANSI Standard 60 and/or Standard 61 certified product is required or desired.



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Date 5/17 - (Continued)

**TYPICAL PROPERTIES:**

**CLARION® FOOD MACHINERY GEAR OILS**

ISO Grade	150	220	460	680
Material Code	633547009	633546009	633548009	633549009
Gravity, ASTM D 4052, °API	30.3	29.3	28.9	28.6
Density, lbs/gallon	7.28	7.33	7.35	7.36
Flash Point, COC, ASTM D 92, °C (°F)	238 (460)	240 (464)	242 (468)	246 (475)
Pour Point, ASTM D 97, °C (°F)	-7 (+19)	-7 (+19)	-7 (+19)	-15 (+5)
Viscosity, ASTM D 445, cSt at 40°C	148	220	460	686
cSt at 100°C	15.0	18.8	29.6	44.7
Viscosity Index, D 2270	105	105	105	111
Color	L0.5	L1.0	L1.0	L1.0
Water Separation, ASTM D 1401 at 180°F	40-38-2 (10)	40-38-2 (10)	40-39-1 (15)	40-38-2 (30)
Rust Test, ASTM D 665A	Pass	Pass	Pass	Pass
Four-Ball Wear, ASTM D 4172,				
Scar, mm at 20 Kg	0.32	0.34	0.34	0.34
Scar, mm at 40 Kg	0.40	0.44	0.44	0.44
FZG Scuffing Load Capacity, ASTM D 5182	>12	>12	>12	>12
ANSI/AGMA 9005-E02	4EP	5EP	7EP	8EP
Oxidation Stability, ASTM D 943, hrs	6000+	6000+	6000+	6000+
Kosher	U	U	U	U
Halal	M	M	M	M
NSF Registered (Registration Number)	H1 (139651)	H1 (124623)	H1 (124630)	H1 (155638)
NSF/ANSI Standard 60 Certified	-	✓	-	-
NSF/ANSI Standard 61 Certified	-	✓	-	-
FDA, 21CFR 178.3570	✓	✓	✓	✓

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