

CLARION® FOOD MACHINERY
GEAR OILS



Date 1/09

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 two ISO viscosity grades.

QUALITIES: Clarion Food Machinery Gear Oils meet the requirements of U.S. 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 USDA.

Clarion Food Machinery Gear Oils 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. Clarion Food Machinery Gear Oils 220 and 460 are fortified with high molecular weight polymer for improved high temperature performance.

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.

TYPICAL PROPERTIES:

CLARION® FOOD MACHINERY GEAR OILS

| ISO Grade | 220 | 460 |
|---|--------------|--------------|
| Material Code | 633546009 | 633548009 |
| Gravity, ASTM D 4052, °API | 29.3 | 28.9 |
| Density, lbs/gallon | 7.33 | 7.35 |
| Flash Point, COC, ASTM D 92, °C (°F) | 240 (464) | 242 (468) |
| Pour Point, ASTM D 97, °C (°F) | -7 (+19) | -7 (+19) |
| Viscosity, ASTM D 445, cSt at 40°C | 220 | 460 |
| cSt at 100°C | 18.8 | 29.6 |
| Viscosity Index, D 2270 | 105 | 105 |
| Color | L1.0 | L1.0 |
| Water Separation, ASTM D 1401 at 180°F | 40-38-2 (10) | 40-39-1 (15) |
| Turbine Oil Rust Test, ASTM D 665A | Pass | Pass |
| Four-Ball Wear, ASTM D 4172, Scar, mm at 20 Kg | 0.34 | 0.34 |
| Scar, mm at 40 Kg | 0.44 | 0.44 |
| Oxidation Stability, ASTM D 943, hrs | 6000+ | 6000+ |
| Tackifier | Yes | Yes |
| Kosher | Ⓢ | Ⓢ |
| NSF Registered | H1 | H1 |
| FDA, 21CFR 178.3570 | ✓ | ✓ |