

# CLARION® Food Machinery A/W Oils



## OVERVIEW



- Designed specifically for use as lubricants for food processing equipment.
- Formulated with a high purity white mineral oil and additive system for food processing applications.
- Does not contain any natural products derived 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 that provide excellent wear, rust, and oxidation protection.
- 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.
- Certified under NSF/ANSI/CAN Standards 60 and 61 (ISO 32 and 68 grades only).
- Certified as Kosher (Passover) with the Union of Orthodox Jewish Congregations of America (U).\*
- Certified as Halal with the Islamic Food and Nutrition Council of America (M).\*



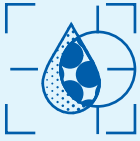
Certified to  
NSF/ANSI/CAN  
Standards  
60 and 61

Clarion Food Machinery  
A/W 32 and A/W 68 Oils  
(ONLY)

## APPLICATIONS

- General purpose lubricants for machinery that processes, packages, or transports food for human consumption.
- Recommended for medium pressure hydraulic systems and circulating systems in food processing, canning, and bottling operations. Can also be used in air line lubrication applications.
- ISO 68 and 100 grades may be used in food machinery worm gears, spur gears, and valves.

## PROPERTIES



## Typical Properties for CLARION Food Machinery A/W Oils:

| ISO Grade                                     | 32          | 46          | 68           | 100         |
|---|-------------|-------------|--------------|-------------|
| Material Code                                 | 633541009   | 633542009   | 633543009    | 633544009   |
| Gravity, °API ASTM D4052                      | 31.5        | 31.4        | 31.1         | 29.9        |
| Density, lb/gallon                            | 7.23        | 7.23        | 7.25         | 7.30        |
| Flash Point, COC, °C (°F) ASTM D92            | 202 (396)   | 206 (402)   | 242 (468)    | 250 (482)   |
| Pour Point, °C (°F) ASTM D97                  | -18 (0)     | -16 (3)     | -9 (15)      | -7 (19)     |
| Viscosity ASTM D445                           |             |             |              |             |
| cSt at 40°C                                   | 32.8        | 46.7        | 64.15        | 100         |
| cSt at 100°C                                  | 5.56        | 6.96        | 8.52         | 11.0        |
| Viscosity Index ASTM D2270                    | 107         | 105         | 103          | 105         |
| Color ASTM D1500                              | L1.0        | L1.0        | L1.0         | L1.0        |
| Water Separability, mL-mL-mL (min) ASTM D1401 |             |             |              |             |
| @ 130°F                                       | 40-40-0 (5) | 40-40-0 (5) | 40-40-0 (10) | -           |
| @ 180°F                                       | -           | -           | -            | 40-40-0 (5) |
| Rust Test ASTM D665A                          | Pass        | Pass        | Pass         | Pass        |
| Four-Ball Wear, ASTM D4172                    |             |             |              |             |
| mm @ 20kg                                     | 0.32        | 0.32        | 0.32         | 0.34        |
| mm @ 40kg                                     | 0.40        | 0.40        | 0.40         | 0.42        |
| Vickers Pump Wear, mg ASTM D2882              | 15          | 15          | 15           | 15          |
| FZG Scuffing Load Capacity ASTM D5182         | 11          | 11          | >12          | >12         |
| ANSI/AGMA 9005-E02                            | -           | -           | 2EP          | 3EP         |
| Oxidation Stability, hr ASTM D943             | >8000       | >8000       | >8000        | >8000       |
| Tackifier                                     | No          | No          | No           | Yes         |
| Kosher*                                       | Ⓢ           | Ⓢ           | Ⓢ            | Ⓢ           |
| Halal*  | Ⓜ           | Ⓜ           | Ⓜ            | Ⓜ           |
| NSF Registered (Registration Number)          | H1 (124625) | H1 (124628) | H1 (124632)  | H1 (124620) |
| NSF/ANSI/CAN Standard 60 Certified*           | ✓           | -           | ✓            | -           |
| NSF/ANSI/CAN Standard 61 Certified*           | ✓           | -           | ✓            | -           |
| FDA, 21CFR 178.3570                           | ✓           | ✓           | ✓            | ✓           |

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\*Excludes product delivered by bulk transport.