

# CLARION® FOOD MACHINERY A/W OILS

Date 09/15

#### DESCRIPTION:

Clarion Food Machinery A/W Oils are designed specifically for use as lubricants for food processing equipment. 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 A/W Oils meet the requirements of U.S. FDA regulation 21 CFR 178.3570 for incidental food contact and are registered as NSF H1 lubricants, for use in food processing plants under the jurisdiction of the USDA.

Clarion Food Machinery A/W 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 A/W Oils are general purpose lubricants for machinery that processes, packages, or transports food for human consumption.

Clarion Food Machinery A/W Oils are recommended for medium pressure hydraulic systems and circulating systems in food processing, canning and bottling operations. They can also be used in air line lubrication applications.

Clarion Food Machinery A/W 68 and 100 Oil may also be used as gear oils for use in food machinery worm gears, spur gears and valves.

### **CLASSIFICATIONS:**

**NSF H1 Registered** — Listed in "NSF Registered Proprietary Substances and Nonfood Compounds." These products are authorized for use under USDA Inspection and Grading Programs.

NSF/ANSI Standard 60 and 61 — Clarion Food Machinery A/W 32 and A/W 68 Oils are certified under NSF/ANSI Standard 60: Drinking Water Treatment Chemicals—Health Effects and NSF/ANSI Standard 61: Drinking Water System Components—Health Effects. Clarion Food Machinery A/W 32 and A/W 68 Oils may be used in water well pump and other potable water system lubrication applications where lubricants certified to these standards are required or desired.



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

(Continued)



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Date 09/15 - (Continued)

## **TYPICAL PROPERTIES:**

## **CLARION® FOOD MACHINERY A/W OILS**

ISO Grade	32	46	68	100
Material Code	633541009	633542009	633543009	633544009
Gravity, ASTM D 4052, °API	31.5	31.4	31.1	29.9
Density, lbs/gallon	7.23	7.23	7.25	7.30
Flash Point, COC, ASTM D 92, °C (°F)	202 (396)	206 (402)	242 (468)	250 (482)
Pour Point, ASTM D 97, °C (°F)	-18 (0)	-16 (+3)	-9 (+15)	-7 (+19)
Viscosity, ASTM D 445, 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, D 2270	107	105	103	105
Color	L1.0	L1.0	L1.0	L1.0
Water Separation, ASTM D 1401				
at 130°F	40-40-0 (5)	40-40-0 (5)	40-40-0 (10)	_
at 180°F	_	_	_	40-40-0 (5)
Rust Test, ASTM D 665A	Pass	Pass	Pass	Pass
Four-Ball Wear, ASTM D 4172,				
Scar, mm at 20 Kg	0.32	0.32	0.32	0.34
Scar, mm at 40 Kg	0.40	0.40	0.40	0.42
Vickers Pump Wear, ASTM D 2882, mg	15	15	15	15
FZG Scuffing Load Capacity, ASTM D 5182	11	11	>12	>12
ANSI/AGMA 9005-E02	_	_	2EP	3EP
Oxidation Stability, ASTM D 943, hrs	+0008	+0008	+0008	+0008
Tackifier	No	No	No	Yes
Kosher	$\bigcirc$	$\bigcirc$	$\bigcirc$	<b>(</b> )
Halal	(M)	(M)	(M)	(M)
NSF Registered (Registration Number)	H1 (124625)	H1 (124628)	H1 (124632)	H1 (124620)
NSF/ANSI Standard 60 Certified	<b>✓</b>	_	<b>✓</b>	_
NSF/ANSI Standard 61 Certified	<b>✓</b>	_	<b>✓</b>	_
FDA, 21CFR 178.3570	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>

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