PRODUCT INFORMATION SHEET

CLARION® Green A/W Oils

OVERVIEW

- Designed for use in the pumps and gears of high-pressure hydraulic equipment operating in environmentally sensitive areas.
- High-performance, ashless, zinc-free, anti-wear hydraulic oils.

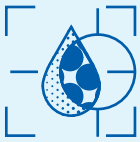
FEATURES & BENEFITS

- Inherently biodegradable, easily recycled, and compatible with other premium mineral oil-based lubricants.
- Excellent thermal and oxidative stability.
- A state-of-the-art, ashless additive package provides excellent wear protection for pump components, excellent rust and corrosion protection, hydrolytic stability, and longer service life.
- Pass the U.S. Coast Guard static sheen test requirements.
- Non-toxic to aquatic life, exceeding U.S. EPA LC50 test requirements for mysid shrimp, rainbow trout, and fathead minnow.
- Meet or exceed ANSI/AGMA 9005-E02 requirements for antiscuff/antiwear (EP) oils.

APPLICATIONS

- Recommended for high-pressure, high-temperature, vane, piston, and gear-type hydraulic pumps operating in environmentally sensitive areas.
- Used in hydraulic lifts and cranes on off shore drilling and production platforms.
- Used in scalpers, excavators, and wheel loaders in the forestry industry.
- Used in dredges, kelp cutters, and pile drivers in the marine industry.

PROPERTIES



Typical Properties for CLARION Green A/W Oils:

ISO VIS Grade	22	32	46	68
Material Code	633550009	633551009	633552009	633553009
Gravity, °API ASTM D4052	33.5	32.5	32.3	31.6
Flash Point (COC), °F (°C) ASTM D92	376 (191)	400 (204)	402 (206)	468 (242)
Pour Point, °F (°C) ASTM D97	5 (-15)	0 (-18)	3 (-16)	15 (-9)
Viscosity ASTM D445				
cSt @ 40°C	21	33.1	46.7	64.2
cSt @ 100°C	4.1	5.6	7.2	9.3
Viscosity Index, ASTM D2270	101	106	104	102
Water Separability, mL-mL-mL(min) ASTM				
D1401 @ 130°F	40-40-0(5)	40-40-0(5)	40-40-0(5)	40-40-0(5)
Four Ball Wear, mm D4172				
20kg	0.47	0.46	0.43	0.42
40kg	0.56	0.56	0.55	0.55
Rust Prevention ASTM D665 A/B	Pass	Pass	Pass	Pass
Copper Corrosion				
3 hr @ 100°C ASTM D130	1A	1A	1A	1A
FZG Scuffing Load Capacity				
ASTM D5182	11	11	11	>12
Oxidation Stability, hr ASTM D943	>8,000	>8,000	>8,000	>8,000

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