



Clarity AW

High performance hydraulic oil

Product description

Clarity AW is a range of premium mono grade, high performance hydraulic oil range, designed to meet the stringent demands of modern OEM designs, where increased performance of the hydraulic oil is required. Clarity AW helps provide protection to both mobile and stationary hydraulic vane-, piston- and gear-type pumps operating in industrial and marine applications and in environmentally sensitive areas, where impact of the hydraulic oil on the surrounding environment is a concern.

Clarity AW is formulated with premium base oil technology in combination with a premium zinc-free and ash-free additive system, to contribute to advanced oxidation stability, water separation, and foam suppression and help provide effective wear, rust, and corrosion protection.

Clarity AW is not considered to be an environmental acceptable hydraulic oil according to ISO 15380 and is not VGP compliant. In case such a product is needed, please use Clarity Synthetic EA Hydraulic oil.

Clarity AW replaces Clarity Hydraulic Oil AW 32, 46, 68.

Customer benefits

- Advanced hydrolytic stability helps prevent corrosive wear resulting in maximum productivity and reduced downtime.
- Offers effective oxidation stability for optimum fluid performance throughout the entire drain period.
- Formulated to control sludge to help maintain system cleanliness and reliability.
- Advanced anti-wear performance to protect pump and system components.
- Effective filterability for long filter life and minimal pressure differentials.
- Very low, acute aquatic toxicity to both fish and invertebrates based on tests of water accommodated fractions.

Product highlights

- **Helps enhance productivity through improved hydrolytic stability.**
- **Advanced oxidation stability promotes fluid longevity.**
- **Good sludge control helps maintain system cleanliness and reliability.**
- **Offers component protection with advanced anti-wear performance.**
- **Offers extended filter life with effective filterability.**
- **Formulated for minimal aquatic toxicity to fish and invertebrates.**

Selected specification standards include:

ASTM	DIN
Eaton	Fives Cincinati
GB (China National Standards)	ISO
JCMAS (Japan Construction Mechanization Association)	Parker Hannifin (Dennison)
SS (Swedish Standard)	

Applications

- Clarity AW hydraulic oils are designed for advanced performance in applications involving:

ISO Grade	32	46	68
Mobile and stationary hydraulic vane-, piston-, and gear-type pumps	X	X	X
High performance industrial applications where pressures may exceed 5000 psi	X	X	X
Servo-valves using multi-metal components	X	X	X

Clarity AW is designed for environmentally sensitive applications, including:

- Marine
- Agriculture
- Forestry
- Mining
- Construction

Clarity AW is highly recommended for high pressure systems:

- Injection moulding
- Mobile equipment

Please contact the equipment manufacturer (OEM) if equipment is operating outside normal operation conditions.

Compatibility testing should be conducted if Clarity AW is used to top up an existing system.

Standard recommendation is to always drain and flush the system.

Approvals, performance and suitable for use

Approvals and performance			
ISO Grade	32	46	68
Parker Hannifin (Dennison) HF-0, HF-1, HF-2	A	A	A
Eaton E-FDGN-TB002-E (specification for top tier mineral based anti-wear hydraulic fluids; ISO 10-150)	A	A	A
ASTM D6158 HM	M	M	M
DIN 51524/2 HLP	M	M	M
ISO 11158 HM	M	M	M
GB 11118.1 L-HM High Pressure	M	M	M
Fives Cincinnati	P-68	P-70	P-69
JCMAS HK P041	M	M	
SS 155434-Type M	M	M	M

A: Approved for

M: Performance: Meets or exceeds requirements

Product maintenance and handling

Clarity AW is not compatible with zinc/calcium containing fluids, and OEM recommended lubricant change-out procedures including drain and flush requirements need to be adhered to.

Do not use in use in high pressure systems in the vicinity of flames, sparks, and hot surfaces. Use only in well ventilated areas. Keep container closed.

Avoid Any spillage of used and unused product to the environment.

Product residue and package/container should be disposed of in dedicated collection points.

Typical test data				
Test	Test Methods	Results		
Viscosity Grade		32	46	68
Appearance	Visual	Bright & Clear	Bright & Clear	Bright & Clear
Color	ASTM D1500	L0.5	L0.5	L0.5
Density at 15°C, kg/l	ASTM D4052	0.869	0.871	0.865
Kinematic viscosity at 100°C, mm ² /s	ASTM D445	5.6	7.0	9.1
Kinematic viscosity at 40°C, mm ² /s	ASTM D445	32.01	46.4	68.2
Kinematic viscosity at 0°C, mm ² /s	ASTM D445	319	537	929
Viscosity Index	ASTM D2270	113	109	108
Pour point, °C	ASTM D97	-39	-33	-27
Flash point COC, °C	ASTM D92	226	228	248
Foam Seq I, foam tendency/stability ml	ASTM D892	20/0	20/0	20/0
Foam Seq II, foam tendency/stability ml	ASTM D892	50/0	50/0	50/0
Foam Seq III, foam tendency/stability ml	ASTM D892	50/0	50/0	50/0
Water separation, oil/water/emulsion, min		40-39-01 (15)	40-39-01 (20)	40-38-02 (30)
Air release at 50°C, min		1.6	2.8	7.5

The typical test data set out above does not constitute a specification. It is indicative only and can be affected by allowable production tolerances. Chevron may modify this test data. Modified data will supersede all previous data, so please ensure you refer to the latest version of this Product Data Sheet (PDS).

Disclaimer: Data provided in this Product Data Sheet (PDS) is based on standard tests under laboratory conditions and is indicative only. This product should not be used for any purpose other than those expressly set out in this PDS. The user has sole responsibility for verifying that this product is suitable for the user's intended application. Neither Chevron nor its subsidiaries (i) make any warranty or representation as to the accuracy or completeness of this PDS; and/or (ii) accept liability for any loss or damage suffered as a result of the use of this product other than in accordance with the terms of this PDS.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

When disposing of used product, take care to protect the environment and follow local legislation.

Safety Data Sheets (SDS's) are available for all Chevron products. If you require a SDS or any further information regarding a Chevron product, please contact your local sales office or see <http://europe.chevronlubricants.com>.

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