



## Paradene AW

Anti-wear Hydraulic Oil

### Description

Castrol Paradene AW is a premium industrial anti-wear hydraulic oil line for hydraulically activated equipment that utilizes high performance pumps. They contain very effective anti-wear additives that allow them to meet or exceed industry vane, gear, and piston pump manufacturers' specifications. These fluids are highly dependable, peak efficiency oils, which meet the lubricant demands of precision industrial equipment.

Castrol Paradene AW will remain very stable and clean in today's machine tool equipment where increasingly sophisticated control systems are used.

### Application

Castrol Paradene AW has been specially formulated to provide good anti-wear and thermal stability performance using proven additive technology. The careful blend of additives with a high quality base stock ensures that Paradene AW has excellent hydrolytic and oxidative stability while exhibiting a minimal tendency to produce sludge and deposits. In addition, Paradene AW provides corrosion protection to ferrous and yellow metal components found within a hydraulic system. This range is designed for use in industrial hydraulic systems which require antiwear protection such as lightly loaded gears, variable speed units and bearings. The Paradene AW range is compatible with the most commonly used nitrile, silicone and fluropolymer seal materials..

Paradene AW is classified as follows:

DIN 51502 classification - HLP  
ISO 6743/4 - Hydraulic Oils Type HM

Paradene AW meets the requirements (for appropriate viscosity grade) of:

Parker Hannifin (Denison) HF0, HF1 & HF2

Eaton E-FDGN-TB002-E

Vickers 35VQ25A - meets performance requirements/Vickers M-2950-S Mobile Hydraulic Systems and I-286-S Industrial Hydraulic Systems

Fives Cincinnati P68, P69 & P70

Meets Racine S106 and Joy Mining Machinery HO-T (AW 46), HO-S (AW 68)

DIN 51524 Part 2

ASTM D6158 HM

ISO 11158 HM

US Steel 126

### Advantages

- Effective anti-wear performance minimizes wear in industrial pump applications prolonging dependable equipment life.
- Special non-silicone anti-foam additive allows for rapid release of entrained air and dependable system response for consistent work yield.
- Careful selection of base stock coupled with optimum additives create maximum hydraulic component yield for long fluid life and equipment life savings.

# Typical Characteristics

Name	Method	Units	AW 22	AW 32	AW 46	AW 68	AW 100	AW 150	AW 220	AW 320
ISO Viscosity Grade	-	-	22	32	46	68	100	150	220	320
Appearance	Visual	-	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright
Specific Gravity @ 15.6°C / 60°F	ISO 3675 / ASTM D1298	kg/m <sup>3</sup>	859	861	877	884	890	891	895	902
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	22	32.3	46.21	67	100.2	150.3	220	321
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	4.3	5.6	6.93	8.75	11.42	18.19	19	24.8
Viscosity Index	ISO 3104 / ASTM D445	None	102	112	106	104	100	104	97	120
Kinematic Viscosity @ 37.8°C / 100°F	ASTM D2161	SUS	114	143	214	315	480	708	1019	1489
Kinematic Viscosity @ 98.9°C / 210°F	ASTM D2161	SUS	40	44	47	55	62	73	96	120
Pour Point	ISO 3016 / ASTM D97	°C / °F	-32/-26	-32/-26	-27/-17	-26/-15	-15/-5	-15/-5	-10/14	-10/14
Flash Point - open cup method	ISO 2592 / ASTM D92	°C / °F	205 / 401	211 / 412	215 / 419	221 / 429	226 / 439	232 / 450	232 / 450	245 / 472
API Gravity	ASTM D287	°API	33.5	32.9	30	28.8	27.5	27.3	26	25.5
Pounds per Gallon	ASTM D287	°API	7.14	7.17	7.3	7.35	7.4	7.45	7.47	7.5
FZG Failure Load Stage	ASTM D5182		11	11	12	12	12	12	12	12
Demulsification, min	ASTM D1401	min	10	10	15	15	20			
Oxidation Life	ASTM D943	hours	>5000	>5000	>5000	>5000	>5000			

Subject to usual manufacturing tolerances.

Paradene AW  
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