

TOTAL AW



LUBRICATION



High performance anti-wear hydraulic oils

APPLICATIONS

- **TOTAL AW OILS** are anti-wear hydraulic oils designed for high-pressure hydraulic systems with gear, piston or vane pumps. Using field proven zinc-type anti-wear additive systems, **TOTAL AW OILS** minimize wear in high-pressure vane and gear pumps and are also excellent performers in axial piston pumps using bronze components. **TOTAL AW OILS** have excellent thermal stability and effectively shed water allowing easy drainage of water from machine sumps.
- **TOTAL AW OILS** are recommended for use in mobile, marine and industrial hydraulic systems. **TOTAL AW OILS** meet or exceed the specifications from major pump manufacturers. **TOTAL AW OILS** are also recommended for many other applications -- air compressors, industrial gearsets and speed reducers, air line lubricators, machine tool drives, etc. -- where anti-wear rust and oxidation inhibited lubricants are required.

SPECIFICATIONS

International
Specifications

OEM

- AFNOR NF E 48-603 HM
- ISO 6743/4 HM
- DIN 51524 P2 HLP
- CINCINNATI MILACRON P68, P69, P70
- DENISON HF0, HF1, HF2 (T6H20C)
- VICKERS M-2950S, -I-286

CUSTOMERS ADVANTAGES

- High protection against wear insuring maximum equipment life.
- Superior thermal stability avoiding formation of sludge even at high temperature.
- Very good oxidation stability ensuring a long service life of the fluid.
- Remarkable filterability even in the presence of water.
- Excellent hydrolytic stability avoiding filter blocking.
- Excellent protection against rust and corrosion.
- Good anti-foam and air release properties (**silicon free**).
- Good demulsibility ensuring rapid water separation
- Reduced maintenance and operating costs

CHARACTERISTICS

PROPERTIES	ASTM Method	AW 22	AW 32	AW 46	AW 68	AW 100
Product code	-	T406001	T406002	T406003	T406004	T406005
ISO Viscosity Grade	D445	22	32	46	68	100
Viscosity in cSt at 40°C	D445	21	32	46	68	102
Viscosity in cSt at 100°C	D445	4.2	5.4	6.9	8.7	11.6
Viscosity index, min.	D2270	100	100	100	99	99
Density in kg/dm ³ at 15°C	D1298	0.87	0.87	0.88	0.88	0.88
Flash Point in °C, minimum	D92	208	220	230	234	240
Pour Point in °C	D97	-35	-32	-30	-27	-22
Color ASTM, maximum	D1500	1.0	1.0	1.0	1.5	1.5
Foaming sequence I, 5 minutes after air injection	D892	None	None	None	None	None
Demulsibility, (oil/water/emulsion) in 30 min.	D1401	40/40/0	40/40/0	40/40/0	40/40/0	40/40/0
Rust test ASTM, synthetic sea water	D665B	Pass	Pass	Pass	Pass	Pass
Oxidation performance, Number of hours before a variation of 2.0 for total acid Number (TAN)	D943	2000+	2000+	2000+	2000+	2000+
Copper strip corrosion test, 3 hours at 100°C	D130	1a	1a	1a	1a	1a

REMARK: Although the preceding values are typical properties, they do not represent guaranteed characteristics.