

# EQUIVIS ZS



Lubrication



## High viscosity index anti-wear hydraulic oils.

### APPLICATIONS

#### Hydraulic systems

- The **Equivis ZS** range is recommended for all kind of hydraulic systems operating under high pressure (limit as indicated by the pump manufacturer) and high temperature (up to 100°C in hot points).
- Lubricants especially suitable for hydraulic systems working under extreme temperature variations and equipment operating outside : easy start up at low temperature (-30°C) and regular operating in all seasons : civil engineering, agriculture, marine, transport and other industrial applications.

### SPECIFICATIONS

#### International specifications

- AFNOR NF E 48-603 HV
- ISO 6743/4 HV
- DIN 51524 P3 HVLP
- CINCINNATI MILACRON P68, P69, P70
- VICKERS M-2950S, -I-286

### ADVANTAGES

#### Long equipment life time High operating reliability

- Very high viscosity index
- Excellent shear stability.
- Superior thermal stability avoiding the formation of sludge even at high temperature.
- Very good oxidation stability ensuring a long service life of the fluid.
- High protection against wear insuring maximum equipment life.
- Excellent hydrolytic stability avoiding filter blocking.
- Remarkable filterability even in the presence of water.
- Excellent protection against rust and corrosion.
- Good anti-foam and air release properties by using **silicon free** components.
- Very low pour point.
- Good demulsibility ensuring rapid water separation.

TYPICAL CHARACTERISTICS	METHODS	UNITS	EQUIVIS ZS					
			15	22	32	46	68	100
Appearance (visual)	Internal	-	Clear liquid					
Density at 15°C	ISO 3675	kg/m <sup>3</sup>	858	861	870	874	882	885
Viscosity at 40°C	ISO 3104	mm <sup>2</sup> /s	14.7	22.4	32.3	46.0	67.5	100.8
Viscosity at 100°C	ISO 3104	mm <sup>2</sup> /s	3.7	5.1	6.5	8.4	11.2	15.6
Viscosity index	ISO 2909	-	151	164	160	161	161	165
Cleveland flash point	ISO 2592	°C	174	202	208	215	220	230
Pour point	ISO 3016	°C	- 42	- 42	- 39	- 39	- 36	- 36
FZG (A/8, 3/90) – stage fail	DIN 51354	palier	-	-	10	11	11	-
Filterability index (IF)	NF E 48-690	-	1.05	1.02	1.09	1.02	1.09	1.05
Shear resistance 250 cycles								
Viscosity loss @ 40°C	DIN 51382	%	-	-	3	5	8	-

Above characteristics are mean values given as an information.

#### TOTAL LUBRIFIANTS Industrie & Spécialités

9 october 2002 (supersedes 14 june 2001)

EQUIVIS ZS

1/1

This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.

A material safety data sheet conforming to the regulations in use in the E.C. can be obtained from your local commercial adviser or down loaded from

[www.quick-fds.com](http://www.quick-fds.com).

