Product Information:

LIQUIMATIC 1,2,3,4,5,6,7,8
Zinc Free Hydraulic Oils

Description
A range of high quality hydraulic oils formulated with Group II base fluids, incorporating zinc-free additive technology and available in a variety of viscosity grades. They are rust and oxidation inhibited and will provide protection against corrosion even in the presence of seawater. Excellent anti-wear properties provide protection against wear in the most demanding of systems. The presence of effective anti-foam additives facilitate the rapid release of air and reduce sponginess in system operation. These hydraulic oils meet the stringent filterability requirements of modern hydraulic machines and robotics.
Group II base oil technology ensures reduced evaporation losses in high temperature applications, particularly with the lower viscosity grades and improved deposit control in critical valve gear.

Features
- Zinc free additive
- Excellent water separation properties
- Long oil life
- Compatible with all bronze, silver and steel system parts
- Rapid air release properties
- Excellent thermal stability
- Excellent filterability

Applications
Recommended for both Industrial and off highway hydraulic systems. Other applications include: machining centre headstocks, centralised lubrication systems, hydrostatic drives, power steering, compressors, suspension units, tipping gear, airline lubricators, jacks, PTOs, et cetera where long life and good filterability is required.

Product Type and Performance Levels (ISO VG 32, 46, 68 only unless stated)

DIN 51502 type HLP (All grades)	Bosch Rexroth RDE 90235
ASTM D6158 type HM (All grades)	Danfoss Vickers E-FDGN-TB002-E
ISO 11158 type HM (All grades)	Parker Denison HF-0, HF-1, HF-2
SAE MS1004 Type HM (All grades)	AIST 126; AIST 127
DIN 51524 Parts I and II type HLP (All grades)	JCMAS P041 HK (ISO VG 46 only)
GM LS2 LH-03-2-11 (ISO VG 32 only)	ZF-TE-ML-21M
GM LS2 LH-04-2-11 (ISO VG 46 only)	ZF-TE-ML-04K (ISO VG 32 and 46 only)
GM LS2 LH-06-2-11 (ISO VG 68 only)	ZF-TE-ML-07H (ISO VG 68 only)

Physical Characteristics

Product – Liquimatic No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
ISO VG Grade	10	15	22	32	46	68	100	150
Relative Density @ 15.6°C	0.841	0.855	0.866	0.857	0.861	0.865	0.877	0.885
Kinematic Viscosity @ 40°C (cSt)	9.97	14.68	22.13	33.59	46.50	66.68	97.30	152.4
Kinematic Viscosity @ 100°C (cSt)	2.68	3.39	4.37	5.81	7.03	9.00	11.16	15.52
Viscosity Index	100	100	100	115	110	110	100	100
Closed Flash Point (°C)	165	170	195	210	215	218	215	226
Pour Point (°C)	-40	-40	-30	-36	-36	-33	-30	-30
Foaming Characteristics (ml)	All Seq < 20-0 max							
Water Separability (mins)	5	8	10	10	10	15	10	20
Rust Test (ASTM D665 A & B)	Pass							

Figures based on average production values