



## MAKER LIBRA HYDRAULIC HLP

### Description

The lubricants of this range are specially designed for use in hydraulic circuits requiring fluids with anti-wear properties. They are manufactured from a mixture of selected mineral bases and high-quality regenerated bases, carefully treated and purified, and specific additives have been selected to enhance their anti-wear properties.

These new oils, in addition to being environmentally friendly, offer the same quality as any other HLP category lubricant on the market. Moving forward in Repsol's commitment with sustainable development, this product range complies with the waste management hierarchy and is the link that completes the ecological chain of manufacturing, use, collection and recovery of used oils.

These oils are specially suitable for most hydraulic circuits, including those requiring special anti-wear protection, both in industry and motoring (dumpers, civil works machines, etc.), regardless of the type of pump with which they are equipped and pressures under which they work.

### Properties

- Resistance to oxidation, ageing and sludge formation.
- Low pour point.
- High viscosity index.
- Compatible with joints.
- Good anti-foam properties.
- Marked anti-wear properties.
- Easy water separation.

### Quality levels, approvals and recommendations

- DIN: 51524-HLP
- ISO: 6743/4 HM, 11158 HM



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## Technical specifications

	UNIT	METHOD	VALUE		
ISO Viscosity Grade			32	46	68
Kinematic viscosity at 100 °C	cSt	ASTM D445	5,4	6.9	8.6
Kinematic viscosity at 40 °C	cSt	ASTM D445	32	46	68
Viscosity index		ASTM D2270	102	105	97
Flash point, open cup	°C	ASTM D92	205	210	210
Pour point	°C	ASTM D97	- 21	-21	- 18
Corrosion Cu, 3hrs 100 °C		ASTM D130	1a	1a	1a
Water separability at 54 °C	min	ASTM D1401	15	20	20
Foams: Sec I, II, III formation	mL	ASTM D892	50/75/50	50/75/50	50/75/50
Foams: Sec I, II, III, stability	mL	ASTM D892	0/0/0	0/0/0	0/0/0
FZG (A/8,3/90): Failure load stage		ISO 14635	11	11	11
Density at 15 °C	g/cm3	ASTM D4052	0.857	0.867	0.879

The above mentioned characteristics are typical values and should not be considered product specifications.