

# Product Information

## AVENO Mineral Hydraulic HLP 46

0002-000312



### Description

AVENO Mineral Hydraulic HLP 46 is an optimally alloyed hydraulic oil. It has a high level of performance and a wide range of applications within the entire industry. AVENO Mineral Hydraulic HLP 46 is characterized especially by a very good viscosity and temperature behavior, high resistance to aging and reliable corrosion protection.

### Instructions for use

AVENO Mineral Hydraulic HLP 46 is suitable for all hydraulic systems and universally applicable. The use of AVENO Mineral Hydraulic HLP 46 is recommended especially for use in circulation systems, for the supply of small gearboxes, for thermally highly stressed hydraulic systems with high-pressure pumps of all models, in sensitive control systems, and for hydraulic systems in agriculture.

### Quality classification

#### Specification

- AFNOR NF E 48-603 HM
- ASTM D6158
- CETOP RP 91H HM
- DIN 51524-2
- GB 111118.1 L-HM (conventional)
- ISO 11158 HM
- ISO 6743-4 HM
- JCMAS HK
- MIL-PRF-17672 E
- NATO H-573
- SAE MS1004 HM
- SEB 181 222
- US Steel 126/127/136
- VDMA 24318

### Recommendation

- Arburg
- Atos
- Bosch Rexroth RE-90220
- Danieli Hydraulics
- Denison HF-0/HF-1/HF-2
- Eaton/Sperry Vickers I-286-S
- Eaton/Sperry Vickers M-2950-S
- Fives Cincinnati P-55/P-70
- GM LH-02-1-04, GM LS-2
- Metso
- Müller Weingarten
- Sauer-Danfoss 520L0463
- ZF TE-ML 07H

### Properties

- High level of performance
- High resistance to aging
- Excellent wear protection
- Very good viscosity and temperature behavior
- Reliable corrosion protection, neutral towards sealants

### Technical specifications

| Properties                   | Data        | Unit               | Testing under            |
|------------------------------|-------------|--------------------|--------------------------|
| Kinematic Viscosity at 40°C  | 46,1        | mm <sup>2</sup> /s | DIN 51659-2:2017-02      |
| Kinematic Viscosity at 100°C | 7,2         | mm <sup>2</sup> /s | DIN 51659-2:2017-02      |
| Viscosity Index              | 116         |                    | DIN ISO 2909:2004-08     |
| Appearance                   | YELLOWBROWN |                    | VISUELL                  |
| Density at 15°C              | 864         | kg/m <sup>3</sup>  | DIN EN ISO 12185:1997-11 |
| Pour Point                   | -36         | °C                 | ASTM D 7346:2015         |