

## AVIA HYDRAULIC OIL HLP

### Description

AVIA hydraulic oils HLP are designed for use in heavy duty power transmission systems and hydraulic control systems.

AVIA HLP oils are formulated on the base of deeply refined, dewaxed and hydrorefined mineral oils received from crude oil straight-run distillation. The oils contain a properly selected package of anticorrosion, antioxidation and lubrication additives as well as demulsifying and antifoam attributes.

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### Characteristics

AVIA hydraulic oils HLP can be applied in hydraulic systems where the oils with upgrade high anti-wear properties are required. HLP oils meet the requirements of ISO L-HM for hydraulic oils and can be used wherever the OEM recommends L-HM class. HLP can also be applied in underground excavations of mining plants and in other difficult operating conditions along with high temperatures and humidity.

### Characteristics

The oils formula guarantees:

- optimum protection of the lubricated elements surface,
- high antifoam properties,
- good air release,
- excellent demulsifying properties,
- hydrolytic stability,
- high filterability,
- cleanness of the lubrication system,
- anti-wear protection and a long life of the lubrication system elements.

The oils are designed for:

- hydraulic power transmission systems,
- hydraulic gears,
- control gears,
- gear pumps – pressure up to 25 MPa
- piston pumps – pressure up to 35 MPa

### Specifications

ISO VG 32-150  
DIN HLP (DIN 51524 cz2)  
ISO-L-HM

### Typicals

| №. | Requirements                | Research methods by | Unit               | Value |     |     |     |     |
|----|-----------------------------|---------------------|--------------------|-------|-----|-----|-----|-----|
|    |                             |                     |                    | 32    | 46  | 68  | 100 | 150 |
| 1. | Kinematic viscosity at 40°C | ASTM D-445          | mm <sup>2</sup> /s | 32    | 46  | 68  | 100 | 148 |
| 2. | Pour point                  | ASTM D-5950         | °C                 | -30   | -33 | -27 | -25 | -21 |
| 3. | Flash point                 | PN-EN ISO 2592      | °C                 | 215   | 230 | 236 | 245 | 248 |



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|    |                                       |               |     |     |     |    |    |    |
|----|---------------------------------------|---------------|-----|-----|-----|----|----|----|
| 4. | Demulsifying properties               | PN-86/C-04065 | min | 20  | 20  | 20 | 25 | 25 |
| 5. | Viscosity index                       | ASTM D-2270   |     | 99  | 97  | 97 | 95 | 95 |
| 6. | Filterability:<br>- oil without water | PN-90/C-04188 | s   | 180 | 180 |    |    |    |

The above given data are values received at normal tolerance of production batch, they are not included in technical specification and they can undergo changes for constant development of the product.

**Packaging** 180kg, in bulk

**Storage** The products should be stored under a roof. If they are stored in the open air where they can be exposed to atmospheric conditions – rains, they should be placed in a horizontal position in order to avoid inrush of water to a container and to prevent label damaging; they should be covered with tarpaulin.  
The products should not be stored at the temperature above 60oC and in the places where solar radiation is very strong or – temperatures very low. The expiry date is 5 years if the storage conditions are satisfied.

### Health, Occupational Health and Safety, Environment

Safety information is included in the Safety Data Sheet (SDS Safety Data Sheet). It contains detailed information on the potential hazards, precautions and First Aid measures, together with information on the impact on the environment and the disposal of used products. UNIMOT S.A. AVIA POLSKA and cooperating companies do not take responsibility for the consequences of improper product use or non-use of the precautions. Before using the product for purposes other than those listed, please consult your local UNIMOT S.A. AVIA POLSKA office.