

# CEPSA ENGRANAJES HPS

## Description



Totally synthetic lubricating oil, formulated with polyglycols in combination with antioxidants, corrosion inhibitors and Extreme Pressure additives which guarantee effectiveness in various applications and in the most extreme operating conditions, with service temperatures between -35 °C and 200 °C.

### **Applications**

- Lubrication of enclosed gear couplings, worm-gear reducers, ball and roller bearings and all equipment working in the severest conditions with heavy loads and high temperatures where use of an EP lubricant is required.
- o KIRKSTALL worm-gear guides.
- Paper, textiles and plastics machinery where a synthetic oil is recommended and when working above 150 °C.

#### **Performance**

The product's totally synthetic formulation gives it the following advantages over mineral oils:

- Less energy loss thanks to a very low coefficient of friction and high heat transference, which means it is specifically recommended for worm-gear reducers.
- o Reduction of wear in the components it lubricates.
- o Greater heat stability with a large decrease in the formation of all types of deposit.
- o Reduction in stoppage time, with lower lubrication costs.
- Low pour points and very high viscosity indices allow a broad range of uses at high and low temperatures, improving circulation.
- o Compatible with most joints and gaskets.

#### **Precautions**

This product must not be mixed with mineral oils for this would considerably decrease its performance.
Lubrication systems must therefore be thoroughly cleaned when changing from a mineral oil to CEPSA ENGRANAJES HPS synthetic oil.

### Specifications

· DIN 51517 Parte 3 (CLP)

· ISO 12925-1 Type CKC / CKD / CKS

### Typical Characteristics

| CHARACTERISTICS                 | ASTM STANDARD | CEPSA ENGRANAJES HPS |       |       |       |
|---------------------------------|---------------|----------------------|-------|-------|-------|
| ISO grade                       | (ISO-3448)    | 150                  | 220   | 320   | 460   |
| Density 15 °C, g/cc             | D-4052        | 0,996                | 1,014 | 1,012 | 1,011 |
| Flash Point COC, °C, min.       | D-92          | 220                  | 232   | 232   | 232   |
| Pour Point, °C, max.            | D-5950        | -30                  | -29   | -26   | -23   |
| Viscosity at 100 °C, cSt        | D-445         | 23                   | 34    | 50    | 71    |
| Viscosity at 40 °C, cSt         | D-445         | 150                  | 220   | 320   | 460   |
| Viscosity Index                 | D-2270        | 185                  | 202   | 220   | 230   |
| Foam, ml, max.                  | D-892         |                      |       |       |       |
| Sequence 1                      |               | 50/0                 | 50/0  | 50/0  | 50/0  |
| Sequence 2                      |               | 50/0                 | 50/0  | 50/0  | 50/0  |
| Sequence 3                      |               | 50/0                 | 50/0  | 50/0  | 50/0  |
| FZG Test, load pass stage, min. | DIN 51354-2   | 12                   | 12    | 12    | 12    |

## Health & Safety and Environment

Health, safety and environmental information is provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures together with environmental effects and disposal of used products.

The typical values of the characteristics appearing in the table are average values given for guidance purposes. These values may be modified without any prior warning.