

# CARTER SH



Lubrication



Synthetic oil (PAO) for enclosed gears.

## APPLICATIONS

Enclosed gears, bearings,  
gear couplings

- **TOTAL CARTER SH** has been developed for enclosed industrial gears to provide optimum gear protection against micropitting and bearing protection against scuffing under very severe conditions.
  - bevel and spur gears
  - Heavily loaded bearings and gear couplings.

## SPECIFICATIONS

International specifications

Manufacturers

- DIN 51517 Part 3 ⇒ group CLP
- NF-ISO 6743-6 category CKD
- AISI 224
- CINCINNATI MILACRON
- DAVID BROWN
- FLENDER
- USINOR FT 161
- MÜLLER WEINGARTEN
- AGMA 9005 - E02

## ADVANTAGES

- Very high protection (high and low temperatures) from micropitting scuffing wear (GFT - class: high).
- Excellent extreme-pressure performance: protection against high loads.
- Very high natural viscosity index: (shear stable) and low friction coefficient.
- Very low pour point: operation at very low temperatures.
- Very good resistance to oxidation: operation at high temperatures, and lifetime increased by a factor of 2 to 4.
- Compatible with seals and metals containing copper.

## HANDLING OPERATIONS - HEALTH - SAFETY

- **CAUTION:** not compatible with oils based on polyglycols.

| TYPICAL CHARACTERISTICS | METHODS      | UNITS              | CARTER SH |       |       |       |       |       |
|-------------------------|--------------|--------------------|-----------|-------|-------|-------|-------|-------|
|                         |              |                    | 150       | 220   | 320   | 460   | 680   | 1000  |
| Density at 15 °C        | ISO 3675     | kg/m <sup>3</sup>  | 856.5     | 859.7 | 861.7 | 863.3 | 864.9 | 869.5 |
| Viscosity at 40 °C      | ISO 3104     | mm <sup>2</sup> /s | 147.9     | 220.1 | 313.8 | 454.7 | 676.0 | 997.8 |
| Viscosity at 100 °C     | ISO 3104     | mm <sup>2</sup> /s | 19.4      | 26.2  | 34.6  | 46.0  | 64.0  | 85.6  |
| Viscosity index         | ISO 2909     |                    | 150       | 152   | 155   | 160   | 165   | 169   |
| Open cup flash point    | ISO 2592     | °C                 | 235       | 237   | 233   | 231   | 237   | 229   |
| FZG Micropitting        | FVA 54 IIV   | -                  | -         | 10 +  | 10 +  | 10 +  | 10 +  | 10 +  |
| FZG A/8.3/90            | DIN 51 354/2 | -                  | > 13      | > 13  | > 13  | > 13  | > 13  | > 13  |
| Pour point              | ISO 3016     | °C                 | - 45      | - 45  | - 42  | - 30  | - 21  | - 18  |

Above characteristics are mean values given as an information.

**TOTAL LUBRIFIANTS**  
**Industrie & Spécialités**  
26-06-2006 (supersedes 06-04-2004)  
CARTER SH  
1/1



This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.  
A material safety data sheet conforming to the regulations in use in the E.C. can be obtained from your local commercial adviser or down loaded from [www.quick-fds.com](http://www.quick-fds.com).