



# Drosera MS

## DESCRIPTION

High performance multifunctional zinc free oils for machine tools.

**Drosera MS** consists of a wide product range for **all components of machine tools (slideways, spindles, hydraulic systems, gears).**

## SPECIFICATIONS

- ISO 6743/ 2: FD2 ; FD5 ; FD10 ; FD 22 ; FD 32
- ISO 6743/ 4: HG32
- ISO 6743/ 13: GA68; GA100; GA150; GA220
- DIN 51502: CGLP46 ; CGLP68 ; CGLP100 ; CGLP150 ; CGLP220 ; CGLP320 ; CGLP 460
- Drosera MS range is homologated by 40+ OEMs

## APPLICATIONS

- Grades ISO VG 68 to 320: machine tool slideways; all conditions of speed / load.
- Grades ISO VG 32 and 46: mainly multipurpose: light to moderate duty horizontal slideways and hydraulic circuits (hydraulic pumps and motors).
- Grades ISO VG 68 to 460: gear boxes and feed mechanisms of all types with or without wet electromagnetic clutches.
- Grades ISO VG 2 to 22: high-speed machine spindles (grades 5, 10, 15, 22) and very high-speed spindles (grade 2).
- Grade ISO VG 460: suitable for hydrodynamic lubrication of mill rolls stands during grinding.
- ISO VG 68 to 150 are also well suited to cold heading applications
- Suitable for centralized systems.

## ADVANTAGES

- Excellent extreme-pressure properties
- Excellent anti-stick-slip properties.
- High tackiness (grades ISO VG 68 to 320).
- Very low coefficient of friction.
- Anti-mist properties.
- Very good foaming resistance.
- Very good protection against rust and oxidation
- Very good anti-wear properties.
- Good filterability.

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 advisor or downloaded at [ms-sds.totalenergies.com](https://ms-sds.totalenergies.com)

## TYPICAL CHARACTERISTICS

| Typical characteristics  | Methods  | Units              | Drosera MS |      |      |      |      |      |      |      |      |      |      |     |     |
|--------------------------|----------|--------------------|------------|------|------|------|------|------|------|------|------|------|------|-----|-----|
|                          |          |                    | 2          | 5    | 10   | 15   | 22   | 32   | 46   | 68   | 100  | 150  | 220  | 320 | 460 |
| Density at 15°C          | ISO 3675 | kg/m <sup>3</sup>  | 824        | 818  | 841  | 843  | 864  | 870  | 880  | 885  | 886  | 890  | 900  | 900 | 905 |
| Viscosity at 40°C        | ISO 3104 | mm <sup>2</sup> /s | 2          | 5    | 10   | 15   | 22   | 32   | 46   | 68   | 100  | 150  | 220  | 320 | 460 |
| Viscosity index          | ISO 2909 |                    | -          | -    | 85   | 100  | 100  | 104  | 104  | 103  | 100  | 99   | 99   | 98  | 95  |
| Flash point<br>Cleveland | ISO 2592 | °C                 | 82         | 150  | 160  | 190  | 210  | 210  | 230  | 240  | 250  | 260  | 260  | 260 | 260 |
| Pour point               | ISO 3016 | °C                 | - 60       | - 30 | - 36 | - 27 | - 27 | - 21 | - 18 | - 15 | - 15 | - 15 | - 12 | - 9 | - 6 |
| Aniline point            | ISO 2977 | °C                 | 69         | 93   | 95   | 96   | 97   | 100  | 102  | 103  | 109  | 110  | 110  | 110 | 110 |

The characteristics shown in this table are typical values given for illustrative purposes.

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