

# Mobil

## Product Data Sheet

# Mobil Super S Series

**Semi-Synthetic Motor Oil**

## Product Description

The Mobil Super S Series are extra high performance semi-synthetic motor oils designed to provide outstanding protection for the engines of all gasoline- and diesel-powered passenger cars, light trucks and vans. Mobil Super S Series are particularly suitable for high performance engines, especially those fitted with turbochargers. These extra high performance products are formulated from a unique blend of synthetic hydrocarbons and highly refined mineral oils and a superior additive system to provide exceptional overall engine cleanliness and protection against wear at high temperatures and under severe operating conditions. Excellent low temperature fluidity ensures easy starting in cold weather conditions and low volatility contributes to low oil consumption.

## Specifications

Mobil Super S Series meets or exceeds the requirements of the following specifications:

- API SH, CF, CD service classifications
- API "Energy Conserving" requirements (Mobil Super S 5W-40)
- CCMC G-5, CCMC PD-2 (Mobil Super S 5W-40, Mobil Super S 10W-40) CCMC G-4, CCMC PD-2 (Mobil Super S 15W-40, Mobil Super S 15W-50, Mobil Super S 20W-50)
- VW 500.00, 505.01 performance (Mobil Super S 5W-40, Mobil Super S 10W-40)  
VW 501.00, 505.01 performance (Mobil Super S 15W-40, Mobil Super S 15W-50, Mobil Super S 20W-50)
- JASO Valve Train Wear Test
- Mobil Super S Series products exceed the engine oil requirements of BMW.
- Mobil Super S Series exceed the engine oil performance recommendations of all major car manufacturers.

## Benefits

The combination of very high quality synthetic hydrocarbons, mineral oils and advanced additive technology ensures that Mobil Super S Series offer performance benefits which are superior to those obtainable with conventional mineral motor oils. These benefits include the following:

- Outstanding engine cleanliness and antiwear properties leading to longer engine life
- Easier starting at low temperatures
- Excellent high temperature properties
- Low oil consumption
- Turbo-proven dependability

## Applications

Mobil Super S Series are recommended for use in all modern passenger car gasoline and diesel engines, including turbocharged models. They are also suitable for all light duty trucks and vans.

Mobil Super S Series are recommended for use under the most severe operating conditions where oils offering superior performance are required.

## Typical Properties

| Mobil Super S<br>Product Code                             |                    | 5W-40<br>97D525 | 10W-40<br>97D673 | 15W-40<br>97D040 | 15W-50<br>97D134 | 20W-50<br>97D726 |
|---|--------------------|-----------------|------------------|------------------|------------------|------------------|
|   | <b>Test Method</b> |                 |                  |                  |                  |                  |
| SAE Grade   |                    | 5W-40           | 10W-40           | 15W-40           | 15W-50           | 20W-50           |
| Viscosity   | ASTM D445          |                 |                  |                  |                  |                  |
| cSt at 40°C   |                    | 86              | 92               | 107              | 136              | 154              |
| cSt at 100°C  |                    | 14.1            | 14.0             | 14.7             | 18.4             | 18.4             |
| Viscosity Index   | ASTM D2270         | 170             | 155              | 142              | 155              | 134              |
| Viscosity after shear,<br>cSt at 100°C                    | DIN 51382          | 13.6            | 13.5             | 13.4             | 17.0             | 17.0             |
| CCS Viscosity   | ASTM D5293         |                 |                  |                  |                  |                  |
| cP at -25°C   |                    | 3200            | -                | -                | -                | -                |
| cP at -20°C   |                    | -               | 3200             | -                | -                | -                |
| cP at -15°C   |                    | -               | -                | 2900             | 2900             | -                |
| cP at -10°C   |                    | -               | -                | -                | -                | 2980             |
| MRV Viscosity/Yield<br>Stress                             | ASTM D4684         |                 |                  |                  |                  |                  |
| cP at -30°C   |                    | 11,600/<35      | -                | -                | -                | -                |
| cP at -25°C   |                    | -               | 12,600/<35       | -                | -                | -                |
| cP at -20°C   |                    | -               | -                | 10,200/<35       | 13,500/<35       | -                |
| cP at -15°C   |                    | -               | -                | -                | -                | 9800/<35         |
| High Temperature/High<br>Shear (HTHS)                     | ASTM D4683         |                 |                  |                  |                  |                  |
| Viscosity (150°C/10 <sup>6</sup> s <sup>-1</sup> )<br>cSt |                    | 3.8             | 3.8              | 3.9              | 4.5              | 4.6              |
| Noack Volatility  | CEC                |                 |                  |                  |                  |                  |
| 1 hr at 250°C   | L-40-T87           |                 |                  |                  |                  |                  |
| Loss wt %   |                    | 11.9            | 12.2             | 12.8             | 12.3             | 8.2              |
| Flash Point, °C   | ASTM D92           | 222             | 223              | 218              | 218              | 226              |
| Pour Point, °C  | ASTM D97           | -51             | -36              | -30              | -30              | -27              |

## **Health & Safety**

Based on available toxicological information, these products produce no adverse effects on health when properly handled and used. No special precautions are suggested beyond attention to good personal hygiene, including laundering oil-soaked clothing and washing skin contact areas with soap and water. Additional health and safety information on these products, including Material Safety Data Bulletins, is available on request from your local Mobil company.