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|--------------------|--|---|--------------------|
| BB00.40-P-0223-02A | Specified engine oils (service) - Overview | Sheet 223.2<br>For Mercedes-Benz and Smart                                |                    |
|                    |  | Viscosity classes of engine oils (car engines)                            | BB00.40-P-0224-01A |
|                    |  | Viscosity classes of engine oils (CV engines)                             | BB00.40-P-0224-02A |
|                    |  | Multigrade engine oils (specification 226.5)ENGINE ALL                    | BB00.40-P-0226-05A |
|                    |  | Multigrade engine oils (specification 226.9)                              | BB00.40-P-0226-09A |
|                    |  | Low SPAsh multigrade service engine oils (specification 226.51)ENGINE ALL | BB00.40-P-0226-51A |
|                    |  | Single grade engine oils (specification 228.0)                            | BB00.40-P-0228-00A |
|                    |  | Multigrade engine oils (specification 228.1)                              | BB00.40-P-0228-01A |
|                    |  | Single grade engine oils (specification 228.2)                            | BB00.40-P-0228-02A |
|                    |  | Multigrade engine oils (specification 228.3)                              | BB00.40-P-0228-03A |
|                    |  | Multigrade engine oils (specification 228.31)                             | BB00.40-P-0228-31A |
|                    |  | Multigrade engine oils (specification 228.5)                              | BB00.40-P-0228-05A |
|                    |  | Low SPAsh multigrade service engine oils (specification 228.51)           | BB00.40-P-0228-51A |
|                    |  | Multigrade engine oils (specification 229.3)                              | BB00.40-P-0229-03A |
|                    |  | Low SPAsh multigrade service engine oils (specification 229.31)           | BB00.40-P-0229-31A |
|                    |  | Multigrade engine oils (specification 229.5)                              | BB00.40-P-0229-05A |
|                    |  | Low SPAsh multigrade service engine oils (specification 229.51)           | BB00.40-P-0229-51A |
|                    |  | Low SPAsh multigrade service engine oils (specification 229.52)           | BB00.40-P-0229-52A |

## ENGINE ALL

Single grade and multigrade oils can be used year round, taking the outside temperature into account (for application ranges, see sheet 224.1, sheet 224.2).

Before the cold season begins, ensure that the viscosity class (SAE-grade) used is sufficient for the outside temperatures to be expected.

| Passenger car engines, commercial vehicle engines from passenger car range, industrial engines from passenger car range (series 100, series 200, series 600)  |            |     |                    |   |            |       |            |       |       |       |       |
|---|------------|-----|--------------------|---|------------|-------|------------|-------|-------|-------|-------|
| MB Specifications for Operating Fluids Sheet <sup>1.)</sup>   | Multigrade |     | Single/multi-grade |   | Multigrade |       | Multigrade |       |       |       |       |
|   | 226        |     | 228                |   |            |       | 229        |       |       |       |       |
|   | .5         | .51 | .2/.3              |   | .5         | .51   | .3         | .31   | .5    | .51   | .52   |
| <b>Gasoline engines</b>   |            |     |                    |   |            |       |            |       |       |       |       |
| M 155 (SLR)   | –          | –   | –                  | – | –          | –     | ● 1.)      | –     | –     | –     | –     |
| M 152, 157  | –          | –   | –                  | – | –          | –     | –          | –     | ● 2.) | –     | –     |
| M 133, 156, 159   | –          | –   | –                  | – | –          | –     | –          | –     | ● 2.) | ● 2.) | ● 2.) |
| M 275, 285 (Maybach), AMG engines except M 133, 155 (SLR), 156, 159   | –          | –   | –                  | – | –          | –     | –          | –     | ● 2.) | –     | –     |
| M 132 USA, 276.8, 278   | –          | –   | –                  | – | –          | –     | –          | –     | ●     | –     | –     |
| M 122, 272, 273, 276.9  | –          | –   | –                  | – | –          | –     | ●          | –     | ●     | –     | –     |
| M 132 except USA, 266, 271 except EVO   | –          | –   | –                  | – | –          | –     | ●          | ●     | ●     | ●     | ●     |
| M 270, 271 EVO, 274   | –          | –   | –                  | – | –          | –     | ●          | –     | ●     | ●     | ●     |
| Van engines (Citan): M 200.71   | ●          | –   | –                  | – | –          | –     | ●          | –     | ●     | –     | –     |
| <b>Diesel engines</b>   |            |     |                    |   |            |       |            |       |       |       |       |
| <b>in vehicles without diesel particulate filter (DPF)</b>  |            |     |                    |   |            |       |            |       |       |       |       |
| OM 660  | –          | –   | –                  | – | ●          | ●     | ●          | ●     | ●     | ●     | ●     |
| OM 640, 642, 646, 651   | –          | –   | –/●                | – | ●          | ●     | ●          | ●     | ●     | ●     | ●     |
| Van engines (Vito, Viano, Sprinter): OM 611, 612, 646, 647, 651   | –          | –   | –/● 3.)            | – | ● 3.)      | ● 3.) | ● 3.)      | ● 3.) | ● 3.) | ● 3.) | ● 3.) |
| <b>in vehicles with diesel particulate filter (DPF)</b>   |            |     |                    |   |            |       |            |       |       |       |       |
| OM 607 in model 176, 246  | –          | ●   | –                  | – | –          | –     | –          | ●     | –     | ●     | ●     |
| OM 629, 640, 646, 651   | –          | –   | –                  | – | –          | ●     | –          | ●     | –     | ●     | ●     |
| OM 642<br>except OM 642 EU6 in model 164.124/824, 251.124<br>except OM 642 in model 463.306/336/346<br>except OM 642 Bin5 in model 164.125/825, 251.125<br>USA, Canada only<br>except OM 642 EU4 in model 221.122 UK only | –          | –   | –                  | – | –          | ●     | –          | ●     | –     | ●     | ●     |
| OM 642 EU6 in model 164.124/824, 251.124<br>OM 642 in model 463.306/336/346<br>OM 642 Bin5 in model 164.125/825, 251.125 USA, Canada only<br>OM 642 in model 221.122 UK only  | –          | –   | –                  | – | –          | –     | –          | –     | –     | –     | ● 4.) |
| OM 660 (EU3/EU4 with non-regulated DPF)   | –          | –   | –                  | – | ○          | ●     | –          | ●     | –     | ●     | ●     |
| Van engines (Vito, Viano, Sprinter): OM 642, 646, 651   | –          | –   | –                  | – | –          | ● 3.) | –          | ● 3.) | –     | ● 3.) | ● 3.) |

|                             |   |   |   |   |                  |   |   |   |   |   |
|-----------------------------|---|---|---|---|------------------|---|---|---|---|---|
| Van engines (Citan): OM 607 | - | ● | - | - | ● <sup>3.)</sup> | - | - | - | - | - |
|-----------------------------|---|---|---|---|------------------|---|---|---|---|---|

| Commercial vehicle engines, industrial engines from the commercial vehicle range (model series 300, model series 400, model series 500, model series 900) |            |                    |      |            |    |     |
|---|------------|--------------------|------|------------|----|-----|
| MB Specifications for Operating Fluids Sheet <sup>1.)</sup>   | Multigrade | Single/multi-grade |      | Multigrade |    |     |
|   | 226        | 228                |      |            |    |     |
|   | .9         | .0/1               | .2/3 | .31        | .5 | .51 |
| <b>Diesel engines in CV, buses without diesel particulate filter</b>  |            |                    |      |            |    |     |
| Model series 300, 400, 500, 900, OM 457, 460 up to and including Euro III   | -          | ○/●                | ○/●  | ●          | ●  | ●   |
| Model series 500, 900, OM 457, 460 Euro IV/V  | -          | -                  | ○/●  | ●          | ●  | ●   |
| Gas engines   | ●          | -                  | -    | ●          | -  | ●   |
| <b>Diesel engines in CV, buses with diesel particulate filter</b>   |            |                    |      |            |    |     |
| Model series 500, 900, OM 457, 460  | -          | -                  | ○    | ●          | ○  | ●   |
| OM 934, 936   |            |                    |      | ●          | -  | ●   |
| OM 470, 471, 473, 936h  | -          | -                  | -    | -          | -  | ●   |

**Notes:**

As at: 11/2013

The general rule is that the binding oil quality (MB sheet) can be found in the respective vehicle operator's manual.

This table only contains oil types for engines that are currently in production and is valid for the region of Western Europe if not otherwise specified.

Information on unlisted, older engine models can be found in the vehicle operator's manuals or the maintenance procedures. Vehicle-specific special considerations must also be observed for the use of the engine oils.

● Approval

○ Can only be used in exceptional cases or under certain operating conditions/in certain applications.

- May not be used.

1.) **Restriction:** Only SAE-grade 5W-50 products are permitted.

2.) **Restriction:** Only SAE 0W-40 and SAE 5W-40 engine oils may be used!

3.) **Recommendation:** In order to guarantee the cold start ability at temperatures below -20 °C as well as the best possible lubrication behavior at low outside temperatures and due to increased loads (e.g. due to biofuels), the viscosities SAE 0W-30, 0W-40 or SAE 5W-30, 5W-40 are recommended as year-round oils for van engines. Please note the application temperature ranges in the operator's manual or on sheet 224.1 in this regard.

4.) The product "Mercedes-Benz engine oil MB 229.51 BlueTEC" is also permitted.