

BB00.40-P-0223-02A	Specified engine oils (service) - Overview	Sheet 223.2 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

**Engine all (4xWD, BUS, CAR, Heavy transporter, Light transporter, TRUCK, UNIMOG, smart)**

Multigrade oils can be used year-round taking the outside temperature into account (scope of application see Sheet 224.1, Sheet 224.2).

Before the cold season starts, ensure that the viscosity class (SAE-grade) used is adapted to the expected outside temperatures.

<b>Prescribed specification for service fill engine oils</b>										
<b>Car/van engines - Mercedes-Benz, AMG, Maybach, smart</b>										
<b>MB Specifications for Operating Fluids, sheet</b>	<b>Multigrade</b>									
	<b>226</b>		<b>229</b>							
	<b>.5</b>	<b>.3</b>	<b>.31</b>	<b>.5</b>	<b>.51</b>	<b>.52</b>	<b>.6 4.)</b>	<b>.61 4.)</b>	<b>.71 4.)</b>	
<b>Gasoline engines - Western Europe -</b>										
<b>Passenger cars engines</b>										
M 122, 272, 273	-	●	-	●	-	-	-	-	-	-
M 132, 266, 271 except EVO	-	●	●	●	●	●	-	-	-	-
M 133, 156, 159, 176 in model 463 up to model year 2017, 177, 178	-	-	-	● 2.)	● 2.)	-	-	-	-	-
M 152, 157, 158, 275, 277, 279, 285 (Maybach)	-	-	-	● 2.)	-	-	-	-	-	-
M 155 (SLR)	-	● 1.)	-	-	-	-	-	-	-	-
M 176 in model 217, 222, 463 as of model year 2018	-	-	-	-	-	●	-	●	-	-
M 256, 260, 264, 282	-	-	-	-	●	●	-	●	●	-
M 270, 274 except in model 213.053	-	●	-	●	●	●	●	-	-	-
M 271 EVO	-	●	-	●	●	●	-	-	-	-
M 274 in model 213.053	-	-	-	● 2.)	-	-	-	-	-	-
M 276	-	-	-	●	-	-	●	-	-	-
M 278	-	-	-	●	-	-	-	-	-	-
M 281	●	●	-	●	-	-	-	-	-	-
<b>Van engines</b>										
M 200.71 in model 415	●	●	-	●	-	-	-	-	-	-
<b>Gasoline engines - Worldwide without Western Europe -</b>										
<b>Passenger cars engines</b>										
M 122, 132, 266, 271, 271 EVO, 272, 273, 278	-	-	-	●	-	-	-	-	-	-
M 133, 152, 156, 157, 158, 159, 176 in model 463 up to model year 2017, 177, 178, 275, 277, 279, 285 (Maybach)	-	-	-	● 2.)	-	-	-	-	-	-
M 155 (SLR)	-	● 1.)	-	-	-	-	-	-	-	-
M 176 in model 217, 222, 463 as of model year 2018	-	-	-	-	-	●	-	●	-	-
M 256, 260, 264, 282	-	-	-	-	●	●	-	●	●	-
M 270, 274 except in model 213.053/153, 276	-	-	-	●	-	-	●	-	-	-
M 274 in model 213.053/153	-	-	-	● 2.)	-	-	-	-	-	-
M 281	●	●	-	●	-	-	-	-	-	-
<b>Van engines</b>										
M 200.71 in model 415	●	-	-	●	-	-	-	-	-	-
M 274 in model 447	-	-	-	●	-	-	-	-	-	-

<b>Prescribed specification for service fill engine oils</b>											
<b>Car/van engines - Mercedes-Benz, AMG, Maybach, smart</b>											
<b>MB Specifications for Operating Fluids, sheet</b>	<b>Multigrade</b>										
	<b>226</b>		<b>228</b>			<b>229</b>					
	<b>.51</b>	<b>.3</b>	<b>.5</b>	<b>.51</b>	<b>.3</b>	<b>.31</b>	<b>.5</b>	<b>.51</b>	<b>.52</b>	<b>.61 4.)</b>	<b>.71 4.)</b>
<b>Diesel engines - Worldwide -</b>											
<b>in vehicles without diesel particulate filter (DPF)</b>											
<b>Passenger cars engines</b>											
OM 640, 642, 646, 651	-	●	●	●	●	●	●	●	●	-	-
<b>Van engines</b>											
OM 611, 612, 646, 647, 651	-	● 3.)	● 3.)	● 3.)	● 3.)	● 3.)	● 3.)	● 3.)	● 3.)	-	-
<b>in vehicles with diesel particulate filter (DPF)</b>											
<b>Passenger cars engines</b>											
OM 607 in model 117, 156, 176, 246 OM 626	●	-	-	-	-	●	-	●	●	-	-
OM 608	●	-	-	-	-	●	-	●	●	●	●
OM 629, 640, 646, 651	-	-	-	●	-	●	-	●	●	-	-

OM 642 up to incl. YoM 2016 except OM 642 Euro 6 Standard in model 164.124/824, 251.124, 221 (GB), 222 (GB) except OM 642 in model 463.306/336/346 except OM 642 Bin5 in model 164.125/825, 251.125 (USA), (CDN) except OM 642 Euro 4 Standard in model 221.122 (GB)	-	-	-	●	-	●	-	●	●	-	-
OM 642 Euro 6 Standard in model 164.124/824, 251.124, 221 (GB), 222 (GB) OM 642 in model 463.306/336/346 OM 642 Bin5 in model 164.125/825, 251.125 (USA), (CDN) OM 642 Euro 4 Standard in model 221.122 (GB)	-	-	-	-	-	-	-	-	●	-	-
OM 642 as of YoM 2017	-	-	-	-	-	-	-	-	●	-	-
OM 654	-	-	-	●	-	●	-	●	●	●	●
OM 656	-	-	-	-	-	-	-	-	●	●	-
OM 660 (Euro 3 Standard/Euro 4 Standard with non-regulated DPF)	-	-	○	●	-	●	-	●	●	-	-
<b>Van engines</b>											
OM 642, 646, 651	-	-	-	● 3.)	-	● 3.)	-	● 3.)	● 3.)	-	-
OM 607, 622	●	-	-	● 3.)	-	-	-	-	-	-	-
OM 699.3	-	-	-	● 3.)	-	● 3.)	-	-	-	-	-

<b>Prescribed specification for service fill engine oils</b>													
<b>Commercial vehicle engines - Mercedes-Benz</b>													
<b>MB Specifications for Operating Fluids, sheet</b>								Single/multi-grade		Multigrade			
								<b>228</b>					
								<b>.0/1</b>	<b>.2/3</b>	<b>.31</b>	<b>.5</b>	<b>.51</b>	<b>.61</b>
<b>Diesel engines - Worldwide -</b>													
<b>in commercial vehicles, buses without diesel particulate filter (DPF) - Mercedes-Benz</b>													
Model series 300, 400, 500, 900, OM 457	up to and incl. Euro III Standard							○/●	○/●	●	●	●	-
Model series 500, 900, OM 457	Euro IV/V Standard/EEV							-	○/●	●	●	●	-
OM 460	Euro III/V Standard							-	-/●	●	●	●	-
OM 471	Euro V Standard							-	-/●	●	●	●	-
OM 470 with M5S, OM 471 with M5S, OM 473 with M5S	Euro V Standard, export							-	-/●	●	●	●	-
Natural gas engine M906 LAG	EEV							-	-	-	-	●	-
Natural gas engine M936 G5.)	Euro VI standard												
<b>in commercial vehicles, buses with diesel particulate filter (DPF) - Mercedes-Benz</b>													
Model series 500, 900, OM 457								-	-	●	-	●	-
OM 934, 936 with vertical installation	Euro VI standard							-	-	●	-	●	-
OM 936 with horizontal installation	Euro VI standard							-	-	-	-	●	-
OM 470 without M5M, OM 471 without M5M, 473	Euro VI standard							-	-	●	-	●	-
OM 470.913/914/915/921/923 with M5M, OM 471.926/937/938/944/946 with M5M	Euro VI standard							-	-	●	-	●	●
<b>in commercial vehicles, buses with diesel particulate filter (DPF) - third party customers</b>													
OM 470, 471, 473	Euro VI standard							-	-	●	-	●	-
<b>in industrial applications without diesel particulate filter (DPF)</b>													
Model series 500, 900, OM 460	up to and incl. Euro IIIA Standard/US Tier 3 Standard							○/●	○/●	●	●	●	-
Model series 500, 900, OM 460	Euro IIIB Standard/US Tier 4i Standard							-	○/●	●	●	●	-
OM 934, 936	Euro VI Standard/US Tier 4 Standard Euro IIIA Standard downgrade							-	-/●	●	●	●	-
OM 470, 471, 473	Euro VI Standard/US Tier 4 Standard							-	-/●	●	●	●	-
OM 470, 471, 473	Euro IIIA Standard downgrade							-	-/●	-	●	-	-
<b>in industrial applications with diesel particulate filter (DPF)</b>													
OM 934, 936	Euro V Standard/US Tier 4 Standard							-	-/-	●	-	●	-
OM 470, 471, 473	Euro V Standard/US Tier 4 Standard							-	-/-	●	-	●	-

**Notes:**

As a general rule, the binding engine oil specification (MB sheet) can be found in the respective operator's manual for the vehicle. This table only contains engine oil specifications for engines that are currently in production.


Information on unlisted or older engine models can be found in the vehicle's operator's manual or the maintenance procedures.

The specified oil change interval can, amongst other things, depend on the used engine oil specification. Where certain specifications are used, reduced oil change intervals may - where appl. - have to be taken into account. Details can be found in the vehicle's operator's manual, the Service information or maintenance procedures.

● 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 the engine oils SAE 0W-40 and SAE 5W-40 may be used!
  - 3 **Recommendation:** To ensure cold start ability at temperatures below -20 °C as well as optimal lubrication behavior at low outside temperatures and due to increased loads (e.g. due to alternative fuels), the viscosities SAE 0W-30, 0W-40 or SAE 5W-30, 5W-40 are recommended as the 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 **Please note:** The specifications 229.6, 229.61 and 229.71 allow for engine oils with very low viscosities (SAE-grade, HTHS value) that are only permitted for use in the engines approved as per the operator's manual (see also above table). The use of engine oils in non-approved engine types (in particular older engine types) can lead to engine damage.
  - 5  See service information SI18.00-W-0013A and SI18.00-W-0013B