

MB Sheet 223.2

Version: 04/2017

Prescribed Specifications for Service Fill Engine Oils in Passenger Car/ VAN engines - Mercedes-Benz, AMG, Maybach, smart

MB Betriebsstoff-Vorschriften Blatt	226.5 Multigrade	226.51 Multigrade	228.3 Multigrade	228.5 Multigrade	228.51 Multigrade	229.3 Multigrade	229.31 Multigrade	229.5 Multigrade	229.51 Multigrade	229.52 Multigrade	229.6 ¹⁾ Multigrade	229.61 ⁴⁾ Multigrade	229.71 ⁴⁾ Multigrade
Gasoline Engines - Western Europe -													
M 155 (SLR)	-	-	-	-	-	● ¹⁾	-	-	-	-	-	-	-
M 152, M 157, M 158, M 275, M 277, M 279, M 285 (Maybach)	-	-	-	-	-	-	-	● ²⁾	-	-	-	-	-
M 133, M 156, M 159, M 176 in G500, M 177, M 178	-	-	-	-	-	-	-	● ²⁾	● ²⁾	-	-	-	-
M 176 in BR 222	-	-	-	-	-	-	-	-	-	●	-	●	-
M 122, M 272, M 273	-	-	-	-	-	●	-	●	●	-	-	-	-
M 132, M 266, M 271	-	-	-	-	-	●	●	●	●	●	-	-	-
M 271 EVO	-	-	-	-	-	●	-	●	●	●	-	-	-
M 270, M 274	-	-	-	-	-	●	-	●	●	●	●	-	-
M 276	-	-	-	-	-	-	-	●	-	-	●	-	-
M 278	-	-	-	-	-	-	-	●	-	-	-	-	-
M 256	-	-	-	-	-	-	-	-	●	●	-	-	●
M 281	●	-	-	-	-	●	-	●	-	-	-	-	●
VAN engine (Citan): M 200.71	●	-	-	-	-	●	-	●	-	-	-	-	-
Gasoline Engines - Worldwide (except Western Europe) -													
M 155 (SLR)	-	-	-	-	-	● ¹⁾	-	-	-	-	-	-	-
M 133, M 152, M 156, M 157, M158, M 159, M 176 in G500, M 177, M 178, M 275, M 277, M 279, M 285 (Maybach)	-	-	-	-	-	-	-	● ²⁾	-	-	-	-	-
M 176 in BR 222	-	-	-	-	-	-	-	-	-	●	-	●	-
M 122, M 132, M 266, M 271, M 271 EVO, M 272, M 273, M 278	-	-	-	-	-	-	-	●	-	-	-	-	-
M 270, M 274, M 276	-	-	-	-	-	-	-	●	-	-	●	●	-
M 256	-	-	-	-	-	-	-	-	●	●	-	-	●
M 281	●	-	-	-	-	-	-	●	-	-	-	-	-
VAN engine (Citan): M 200.71	●	-	-	-	-	-	-	●	-	-	-	-	-
Diesel Engines - Worldwide -													
(a) in vehicles without particulate filter (DPF)													
OM 660	-	-	-	●	●	●	●	●	●	●	-	-	-
OM 640, OM 642, OM 646, OM 651	-	-	●	●	●	●	●	●	●	●	-	-	-
VAN engines (Vito, Sprinter): OM 611, OM 612, OM 646, OM 647, OM 651	-	-	● ³⁾	● ³⁾	● ³⁾	● ³⁾	● ³⁾	● ³⁾	● ³⁾	● ³⁾	-	-	-
(b) in vehicles with particulate filter (DPF)													
OM 607 (in passenger car vehicles), OM 626	-	●	-	-	-	-	●	-	●	●	-	-	-
OM 629, OM 640-OM 646, OM 651	-	-	-	-	●	-	●	-	●	●	-	-	-
OM642 - up to and including model year 2016 except: OM642 EU6 in BR 164.124/.824, BR 251.124, BR 221 (UK), BR 222 (UK) OM642 in BR 463.306/.336/.346 OM642 Bin5 in BR 164.125/.825, BR 251.125 (only USA and Canada) OM642 EU4 in BR 221.122 (UK)	-	-	-	-	●	-	●	-	●	●	-	-	-
OM642 EU6 in BR 164.124/.824, BR 251.124, BR 221 (UK), BR 222 (UK) OM642 in BR 463.306/.336/.346 OM642 Bin5 in BR 164.125/.825, BR 251.125 (only USA and Canada) OM642 EU4 in BR 221.122 (UK)	-	-	-	-	-	-	-	-	-	●	-	-	-
OM 642 - from model year 2017 onwards	-	-	-	-	-	-	-	-	-	●	-	-	-
OM 660 (EU3/EU4 with none-controlled particulate filter (DPF))	-	-	-	○	●	-	●	-	●	●	-	-	-
OM 654	-	-	-	-	●	-	●	-	●	●	-	-	●
OM 656	-	-	-	-	-	-	-	-	-	●	-	-	●
VAN engines (Vito, Sprinter): OM 642, OM 646, OM 651	-	-	-	-	-	● ³⁾	● ³⁾	-	● ³⁾	● ³⁾	-	-	-
VAN engines (Citan, Vito): OM 607, OM 622	-	●	-	-	-	● ³⁾	-	-	-	-	-	-	-

- Approval
- Can only be used in exceptional cases or under certain operating conditions/in certain applications.
- Must not be used

1.) Restriction: Only SAE 5W-50 engine oils are allowed

2.) Restriction: Only SAE 0W-40 und SAE 5W-40 engine oils are allowed !

3.) Recommendation: In order to ensure cold start operability at temperatures below -20°C as well as optimum lubrication at low outside temperatures and under conditions of high biofuel content in the fuel, the viscosities SAE 0W-30, 0W-40 or SAE 5W-30, 5W-40 are recommended as year-round engine oils for VAN engines. Please note the temperature ranges of vehicle operation indicated in the operator's manual or on sheet 224.1.

4.) To be noticed: The specifications 229.6, 229.61 and 229.71 allow engines oils with very low viscosities (SAE class, HTHS value). Their usage is permitted only according to the manuals of approved vehicles/engines (cp.table above). The usage in engine types not approved for these specifications (in particular older engine types) can cause damage to the engine.

Notes:

In general, the binding engine oil specification (MB-sheet) is documented in the relevant operating manual of the vehicle.

This table contains only engine oil specifications for engines that are currently in production.

Information on unlisted or older engine types are described in the operating instructions of the vehicle or the maintenance instructions.

The prescribed engine oil drain may be dependent on the applied engine oil specification. When using certain specifications reduced engine oil drain intervals have to be considered.

Details are documented in the operating manual of the vehicle, the service information or maintenance instructions.

Multi grade oils can be used all year-round taking into consideration the outside temperature (see sheet 224.1)

The suitability of the applied viscosity grade (SAE grade) for the expected outside temperatures has to be ensured before the cold season starts.

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Prescribed Specifications for Service Fill Engine Oils in Commercial Vehicle Engines - Mercedes-Benz

MB specifications for operating fluids / MB Sheet		228.0 / .1	228.2 / .3	228.31	228.5	228.51	228.61
		Mono- / Multigrade	Mono- / Multigrade	Multigrade	Multigrade	Multigrade	Multigrade
Diesel engines - worldwide -							
(a) in commercial vehicles and busses <u>without</u> particulate filter (DPF)							
BR 300, 400, 500, 900 & OM 457	up to and including Euro III	○ / ●	○ / ●	●	●	●	-
BR 900, BR 500 und OM 457	Euro IV / V	-	○ / ●	●	●	●	-
OM 471	Euro V	-	- / ●	○	●	○	-
Gas engine M 906 LAG	EEV	-	-	-	-	●	-
Gas engine M 936 G	Euro VI	see service informations S118.00-W-0013A and S118.00-W-0013B					
(b) in commercial vehicles and busses <u>with</u> particulate filter (DPF)							
BR 900, BR 500 und OM 457		-	-	●	-	●	-
OM 934, OM 936	Euro VI	-	-	●	-	●	-
OM 936h	Euro VI	-	-	-	-	●	-
OM 470 (except FE1 engine types, cp. next line) OM 471 (except FE1 engine types, cp. next line) OM 473	Euro VI	-	-	●	-	●	-
OM 470 FE1 engine types: 470.913, 470.914, 470.915, 470.921, 470.923 OM 471 FE1 engine types: 471.926, 471.937, 471.938, 471.944, 471.946	Euro VI	-	-	●	-	●	●
(c) in industrial applications <u>without</u> particulate filter (DPF)							
BR 900, BR 500, OM 460	up to and including EU Stage IIIA / US Tier 3	○ / ●	○ / ●	●	●	●	-
BR 900, BR 500, OM 460	EU Stage IIIB / US Tier 4i	-	○ / ●	●	●	●	-
OM 934, OM 936	EU Stage IV / US Tier 4	-	- / ●	●	●	●	-
OM 470, OM 471, OM 473	EU Stage IV / US Tier 4	-	- / ●	●	●	●	●

○ only allowed in exceptional cases and under specific operating conditions / applications
- not allowed

Notes:

In general, the binding engine oil specification (MB-sheet) is documented in the relevant operating manual of the vehicle.

This table contains only engine oil specifications for engines that are currently in production.

Information on unlisted or older engine types are described in the operating instructions of the vehicle or the maintenance instructions.

The prescribed engine oil drain interval is dependent on the applied engine oil specification. When using certain specifications reduced engine oil drain intervals have to be considered.

Details are documented in the operating manual of the vehicle, the service information or maintenance instructions.

Multi grade oils can be used all year-round taking into consideration the outside temperature (see sheet 224.2)

The suitability of the applied viscosity grade (SAE grade) for the expected outside temperatures has to be ensured before the cold season starts.