

### 3.0 Specified oils for BMW Group engines

| <b>Engine</b>                    | <b>Longlife-01<br/>Please refer<br/>to<br/>Enclosure 5</b> | <b>Longlife-01<br/>FE<br/>Please refer<br/>to<br/>Enclosure 6</b> | <b>Longlife-98<br/>Please refer<br/>to<br/>Enclosure 7</b> | <b>Special oil<br/>Please refer<br/>to<br/>Enclosure 8</b> | <b>SAE 10W-<br/>60<br/>Refer to<br/>Enclosure 9</b> | <b>M610<br/>Please refer<br/>to<br/>Enclosure<br/>10</b> | <b>ACEA<br/>Specifications<br/>Please refer to<br/>Enclosure 11</b> |
|----------------------------------|--|---|--|--|---|--|---|
| M43TU                            | X  |   | X  |  |   |  |   |
| M43/CNG                          |  |   |  |  |   | X  |   |
| M47                              | X  |   | X  | X  |   |  | X   |
| M47TU                            | X  |   | X  | X  |   |  | X   |
| M47TU from<br>03/2003            | X  |   |  |  |   |  |   |
| M51<br>(E34,E36)<br>from 09/1995 | X  |   | X  | X  |   |  |   |
| M52TU                            | X  |   | X  |  |   |  |   |
| M54                              | X2)  |   |  |  |   |  |   |
| M57                              | X  |   | X  | X  |   |  | X   |
| M57TU                            | X  |   |  |  |   |  |   |
| M57TU from<br>03/2003            | X  |   |  |  |   |  |   |
| M62 LEV                          | X  |   | X  |  |   |  |   |
| M67                              | X  |   | X  | X  |   |  | X   |
| M67 (E65)                        | X  |   |  |  |   |  |   |
| M73 (E31)<br>from 9/1997         | X  |   | X  | X  |   |  |   |
| M73 (E38)<br>9/97-8/98           | X  |   | X  | X  |   |  |   |
| M73LEV                           | X  |   | X  |  |   |  |   |
| N40                              | X  | X   |  |  |   |  |   |
| N42                              | X  | X   |  |  |   |  |   |
| N45                              | X  | X   |  |  |   |  |   |
| N46                              | X  | X   |  |  |   |  |   |
| N52                              | X  | X   |  |  |   |  |   |
| N62                              | X  | X   |  |  |   |  |   |
| N73                              | X  | X   |  |  |   |  |   |
| S54                              |  |   |  |  | X   |  |   |
| S62 (E39)<br>until 02/2000       |  |   |  |  | X   |  |   |
| S62 (E39)<br>from 03/2000        | X  |   | X  |  |   |  |   |

|  |   |  |   |   |  |  |   |
|--|---|--|---|---|--|--|---|
| S62 (E52)<br>from start of<br>series<br>production | X |  | X |   |  |  |   |
| W10  | X |  | X |   |  |  |   |
| W11  | X |  |   |   |  |  |   |
| W17  | X |  | X |   |  |  | X |
| Other <sup>1)</sup>                                | X |  | X | X |  |  | X |

1) "Others" includes all BMW engines/models which are not listed in the above table, for example M10, M20, M21, M30, M40, M41, M42, M43, M44, M50, M51, M52, M60, M62, M70, M73, S14, S38, S50, S50U, S52, S70, etc.

2) M54 models up to production date 08/2001 are also approved with longlife-98 oils.

BMW specifies different grades of engine oil, depending on the vehicle/engine model. Classification according to these BMW engine oil grades is made depending on comprehensive dynamometer tests.

Here, BMW differentiates between the following engine oil grades:

### **Longlife oils**

These oils satisfy the requirements of specification ACEA:A3/B3. Moreover, they are tested by BMW for their suitability for extended oil service intervals and can be used all year round, regardless of ambient temperature. Due to a tightening of the test conditions introduced at the beginning of 2001 and the introduction of a new generation of engines, it has become necessary to distinguish between longlife oils:

- **Longlife-01:**  
oils satisfy the most stringent quality requirements demanded by BMW. They are specified for vehicles with N42/N62 engines. They can also be employed in all other BMW vehicles (exception: S54, S62/E39 up to 02/2000, M43 CNG).
- **Longlife-01 FE (fuel economy):**  
These oils satisfy the same quality requirements as Longlife-01 oils. Because of their particularly low viscosity, they are able to favorably influence fuel consumption. However, they can only be used in engines whose design allows operation with such low-viscosity oils.
- **Longlife-98 (previously only designated "Longlife"):**  
These oils satisfy the demands defined for the first time in 1998 with the introduction of extended oil service intervals. They are specified for vehicles with spark ignition engines and extended oil change intervals, except for: N42, S54, S62/E39 up to 02/2000.

### **Special oils**

These oils also comply with ACEA A3/B3 and are the predecessor grade to the BMW longlife oils. They are adequate for older vehicles with oil change intervals of up to approx. 15,000 km.

Special oils can be used all year round, SAE 10W-X oils must not be used at temperatures below 20°C.

#### **Note:**

From January 2004, the list of expressly approved special oils will no longer be updated.

### General information concerning oil quality

Only engine oils which are given in the above approvals are to be used for BMW Group engines.

Terms such as "free-running oil", "fully synthetic" etc. do not give sufficient indication of suitability for engines of the BMW Group as they do not describe the quality of the oil exactly as per BMW Group specifications. However, to enable you to answer queries from customers more easily, these terms are explained below:

- "Heavy-duty" (HD): HD oils originally referred to heavily doped (additive-treated) oils for use under difficult operating conditions. Today, HD is just a generic term.
- "Free-running oils" are mostly low-viscosity oils.
- "Mineral, partially or fully synthetic" is simply a reference to the composition of the base oil. Depending on the other components added, the oil can have quite different qualities.

These designations are of secondary importance when selecting an engine oil. Only the approval as documented in the above table should be considered decisive.

## Initial-running or breaking-in oils

No breaking-in oils are used on BMW engines.

For this reason, only the oils which are approved and listed above are to be used if filling or topping up with oil before the 1st oil service on a reconditioned, new or exchange engine.