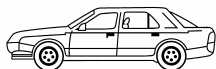


QUARTZ INEO MC3



TOTAL

New Low SAPS generation oil especially developed for BMW and Mercedes-Benz Group engines. Its very high technology optimizes the fonctionnement of the anti-pollution systems, such as the Diesel Particulate Filters.

UTILISATIONS

- QUARTZ INEO MC3 satisfies the most difficult conditions of uses (motorway, intense urban circulation...), all seasons. Is appropriated for all styles of driving, in particular sporting and with high mode.
- QUARTZ INEO MC3 is appropriated for all recent engines (AM 2000 and posterior), multisoupapes, turbocompressed, direct injection, equipped or not with catalyst
- QUARTZ INEO MC3 fully satisfies the new Euro IV environmental standards and optimizes the anti-pollution systems, in particular the Diesel Particulate Filters (DPF).
- QUARTZ INEO MC3 satisfies the maintenance plans of the most demanding manufacturers, especially concerning the lengthened draining intervals.

PERFORMANCES

| | |
|---------------------------|--|
| Specifications | Standard ACEA 2004 C3 API SM/CF |
| OEMS homologations | MERCEDES-BENZ :MB 229.31, MB 229.51 BMW: BMW Long Life 04 VOLKSWAGEN : VW 502.00/505.00/505.01 |

CLIENTS BENEFITS

- | | |
|---|--|
| Increased longevity of the particulate filters | <ul style="list-style-type: none">• Reinforces the action of the Diesel Particulate Filter and prolongs its lifespan, by avoiding its early filling (50% less of metal components than traditional technology oil). |
| Respect of the environment | <ul style="list-style-type: none">• Ensures a better respect of the environment, by ensuring an optimum fonctionnement of the whole systems of depollution and by guaranteeing a high level of engine rendement. |
| Protection and optimal cleanliness of the engine | <ul style="list-style-type: none">• Excellent protection and cleanliness of the engine. |
| Longer draining intervals | <ul style="list-style-type: none">• Ensures an exceptional engine durability and satisfies the plans of maintenance of the most demanding manufacturers by allowing extra long draining intervals (20000 to 40000 kms), thanks to an exceptional oxidation resistance. |

CHARACTERISTICS

| TOTAL QUARTZ INEO MC3 | Method | Unit | Grade 5W-30 |
|-----------------------|------------|--------------------|-------------|
| Viscosity at 40°C | ASTM D445 | mm ² /s | 71,7 |
| Viscosity at 100°C | ASTM 445 | mm ² /s | 12,13 |
| Viscosity index | ASTM D2270 | - | 167 |
| Pour point | ASTM D97 | °C | - 36 |
| Flash Point | ASTM D92 | °C | 220 |
| B.N. | ASTM D2896 | mgKOH/g | 7,4 |

The values of the characteristics appearing in this table are typical values given as an indication.

TOTAL LUBRIFIANTS
16, rue de la République
92800 PUTEAUX
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QUARTZ INEO MC3
novembre 2005
MPC /11/05



This lubricant used according to our recommendations and for the application for which it is planned does not present a particular risk. A card of data of safety in conformity with the legislation in force in the E.C. is available near your commercial adviser.