



SERIE 3 10W

■ Description

Monograde diesel engine oil with great detergent power. Specially recommended for heavy duty applications. Its selected formulation offers excellent oxidation stability, good wear and corrosion protection and excellent low temperature performance throughout the oil drain period. It is suitable for use as the hydraulic fluid in transmissions, differentials or final drives where SAE10W grade is required.

■ Properties

- Excellent detergency and dispersancy to keep the engine clean.
- High dispersancy to resist oil thickening and obtain smooth start-up.
- Very good thermal and oxidation stability to provide a longer fluid life.
- Its alkaline reserve (TBN) protect the engine against corrosion by neutralising the acids formed in the combustion.

■ Quality level

- API CF-4/CF/SG
- CATERPILLAR TO-2

■ Technical characteristics

| | UNIT | METHOD | VALUE |
|-----------------------|-------------------|-------------|----------|
| SAE Grade | | | 10W |
| Density @ 15°C | g/cm ³ | ASTM D 4052 | 0.878 |
| Viscosity @ 100°C | cSt | ASTM D 445 | 6.5 |
| Viscosity @ 40°C | cSt | ASTM D 445 | 40.0 |
| Viscosity index | - | ASTM D 2270 | 114 |
| Flash point, open cup | °C | ASTM D 92 | 200 min |
| Pour point | °C | ASTM D 97 | -24 max |
| T.B.N. | mg KOH/g | ASTM D 2896 | 8.2 |
| Viscosity @ -25°C | cP | ASTM D 5293 | 7000 max |

■ Hazard identification

This product is not classified as toxic or hazardous under current legislation.

■ Handling

Minimum precautions should be taken to avoid prolonged contact with the skin. The use of gloves, visors or glasses is recommended to avoid splashes.

■ Health and Safety Hazards

Inhalation: Given that it is not a particularly volatile product, the risk of inhalation is minimal.

Ingestion: Do not induce vomiting. Provide water. Seek medical advice.

Contact with the skin: Wash with plenty of water and soap.

Eyes: Wash thoroughly with water.

General measures: Seek medical advice.

■ Fire-fighting measures

No special measures required.

Fire-extinguishing measures: Foams, dry chemicals, CO₂, water spray. Do not apply the jet of water directly as this could cause the product to disperse.

■ Environmental precautions

Danger of physical pollution if spilt (water, coastlines, soil, etc.) due to its floatability and oily consistency that may harm flora and fauna on contact. Avoid material getting into water outlets.

Decontamination and cleaning: Treat like an accidental oil spill. Prevent dispersion using mechanical barriers and remove by physical or chemical means.

A safety information file is available on request.

This PDS is available at www.repsoloil.com.my.

For more information about Repsol please visit www.repsol.com

Unless otherwise indicated, the figures cited in technical characteristics should be considered typical.