

# SUPER ROC 3D 10W40

HIGH PERFORMANCE SHPD OIL FOR DIESEL ENGINES

120000/08.19

Rev. 5

## DESCRIPTION & APPLICATIONS

SUPER ROC 3D 10W40 is a SHPD (Super High Performances Diesel) and has been specially elaborated to deal with the most severe requirements of Diesel 4 stroke engines turbo charged for transport or Public works.

SUPER ROC 3D 10W40 is suitable for the lubrication of Diesel engines using low-sulphur Diesel fuel, mostly met on equipments in Public works, on severe conditions of charge and service, and needing API CI-4 level.

## ADVANTAGES

- Allows drain periods up to 40000 km, under analytical control
- Large viscosity range ensuring an exceptional engine lubrication in all climatic conditions and very good protection against wear.

## PERFORMANCES

Satisfies to the following specifications:

ACEA A3/B3 -12  
ACEA E7 - 12  
ALLISON C4  
API CI-4/SL  
CAT ECF 1  
CUMMINS CES 20076/20077  
MACK EO-M+  
MAN 3275  
MB 228.3/229.1  
MTU Type 2  
RVI RLD  
SCANIA LDF  
Volvo VDS 3

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## ENVIRONMENT, HEALTH & SAFETY

Please consult also the Safety Data Sheet about how to manipulate and to stock the product as well as to learn about the first aid measurements in case of accident.

Elimination after use must be made in conformity with the local rules in force about used oils disposal. When needed, Safety Data Sheet can be obtained upon request.

Conservation of the product: 3 year(s) in closed container and sheltered.

## PROPERTIES

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA
SAE grade	-	-	10W40
Specific gravity at 15°C	kg/m <sup>3</sup>	NFT 60101	878
Kinematic viscosity at 40°C	mm <sup>2</sup> /s (cSt)	NFT 60100	102
Kinematic viscosity at 100°C	mm <sup>2</sup> /s (cSt)	NFT 60100	14,9
Viscosity index	-	NFT 60136	152
Dynamic viscosity at -25°C	mPa.s	ASTM D 2602	6680
Flash point (PMCC)	°C	ASTM D 93	201
Pour point	°C	NFT 60105	-33
Sulphated ash content	% wheight	NF T 60143	1
TBN (Total Base Number)	mg KOH/g	ASTM D 2896	9

*The average values are given for information only.*