

# Star Max Gen 6 FE 10W-30

## Star Concept

### KEY DATA



PRODUCT MEETING JASO M 355  
COMPANY GUARANTEEING THIS PERFORMANCE:  
TotalEnergies Lubricants

Very high performance lubricant, specially developed to lubricate several components of the same machine used in Public Works, Mines or Quarries and generating fuel savings.

#### INTERNATIONAL STANDARDS

- 🔥 Engines: API CK-4/ CJ-4 / CI-4+ / CI-4 / CH-4 / SN
- 🔥 ACEA E6, E7, E8, E9, E11
- 🔥 JASO DH-2
- 🔥 Gearbox : API GL-4
- 🔥 Hydraulic systems: ISO VG 46 (after 100 working hrs) HV

#### MANUFACTURER APPROVALS

- 🔥 DTFR 15C110 (228.51) / DTFR 15C120 (228.52)
- 🔥 MTU Category 3.1
- 🔥 MAN M3775
- 🔥 Volvo VDS-4.5
- 🔥 Renault VI RLD-3
- 🔥 Mack EOS-4.5
- 🔥 Cummins CES 20086
- 🔥 Deutz DQC IV-18 LA

#### MEETS THE REQUIREMENTS OF

- 🔥 Engines: Cat ECF-3/ECF-2/ECF-1-a
- 🔥 Detroit Diesel DFS 93K222
- 🔥 DEUTZ TTCD
- 🔥 Gearbox: ZF TE-ML 07D
- 🔥 CATERPILLAR TO-4 (SAE 10W, 30)
- 🔥 CATERPILLAR SATO
- 🔥 ALLISON TES 439
- 🔥 ALLISON C-4
- 🔥 KOMATSU Micro Clutch Test (JCMAS)

#### SUITABLE FOR

- 🔥 Gearbox: Dana
- 🔥 Eaton
- 🔥 Hydraulic systems: JCMAS HK VG46L (Japanese OEMS)
- 🔥 CATERPILLAR HYDO Advanced 10W, 20, 30
- 🔥 KOMATSU HO-MVK / HO56-HE / HO46-HM
- 🔥 CNH MAT 3509 – CASE MS 1230

### APPLICATIONS

Star Max Gen 6 FE 10W-30 is recommended for the lubrication of Diesel engines of the latest generations, including the depolluted engines compliant to the US TIER 4 final or Euro Stage V emission standards, and below. It can also be used for small gasoline or gas engines and piston compressors.

Star Max Gen 6 FE 10W-30 applies in all hydraulic systems, high or low pressure, equipped or not with very high-performance filters.

Star Max Gen 6 FE 10W-30 is suitable for the current generation or older gearboxes, manual or powershift.

Star Max Gen 6 FE 10W-30 can be used in all seasons due to its high viscosity index:

- 🔥 Very fluid at cold temperatures, for easy cold starting of organs with an effective and rapid filtration, even in winter season.
- 🔥 Thick at high temperatures, to keep an optimal protection and a low oil consumption due to its non-conventional base oil components.

## PERFORMANCES & CUSTOMER BENEFITS

Star Max Gen 6 FE 10W-30 is formulated using synthetic technology base oil together with latest generation additives that provide enhanced piston cleanliness & lubrication performance allowing longer drain intervals with fuel economy benefits. Designed & formulated to decrease the number of lubricants needed for the maintenance of the whole machine park and avoids lubricant mistakes.

Meets and surpasses the highest quality levels required by the manufacturers for their engines (E6/CK 4), transmissions (GL 4/TO 4) and hydraulics systems (HK/HM/HV):

- 🔥 Enables longer drain intervals up to the maximum allowed by the OEMs
- 🔥 Self adaptive, thanks to its patented principle the oil fits with the lubricated organ requirement
- 🔥 Provides economies by reducing the fuel consumption
- 🔥 Helps decreasing Carbon Dioxide (CO<sub>2</sub>) emissions
- 🔥 Its Low SAPS chemistry is recommended for engines equipped with exhaust gas after treatment systems, like DPF, SCR, catalyst...

## CHARACTERISTICS\*

TEST	UNIT	TEST METHOD	RESULT
<b>Kinematic viscosity at 40°C</b>	mm <sup>2</sup> /s	ASTM D445	78,2
<b>Kinematic viscosity at 100°C</b>	mm <sup>2</sup> /s	ASTM D445	11.8
<b>Viscosity index</b>	-	ASTM D2270	145
<b>Pour point</b>	°C	ASTM D97	-42
<b>Flash Point</b>	°C	ASTM D92	224
<b>T.B.N</b>	mg KOH/g	ASTM D2896	10.2
<b>Sulphated Ash</b>	% m/m	ASTM D874	0.97

\*The characteristics given above are obtained with a standard tolerance threshold during production and may not be considered specifications.

## RECOMMENDATIONS FOR USE

Before using the product, the vehicle's maintenance guide should be checked. Oil changes should be carried out in accordance with the manufacturer's recommendations.

The product should not be stored at temperatures over 60°C. It should be kept away from sunlight, intense cold and extreme temperature fluctuations. If possible, the packaging should not be exposed to the elements. Otherwise, the drums should be laid horizontally in order to avoid any contamination from water and to prevent the product's label from rubbing off.

## HEALTH, SAFETY AND THE ENVIRONMENT

Based on the toxicological information available, this product should not cause any adverse health effects, provided it is used for its intended purpose and in accordance with the recommendations laid out in the Safety Data Sheet (SDS).

This can be obtained on request from your local reseller and is available for consultation at <https://ms-sds.totalenergies.com>.

This product should not be used for any purposes other than the ones for which it is intended.



TotalEnergies Lubrificants / Last update of this datasheet: August 23 / Star Max Gen 6 FE 10W-30

Some variations can be expected under normal production conditions, but these should not affect the product's expected performance irrespective of the site. The information contained in this document is subject to change without notice. Our products can be viewed on our website at [www.lubricants.totalenergies.com](http://www.lubricants.totalenergies.com).