

TP Star Max HT 15W-40

Star Concept

KEY DATA



Very high performance lubricant specially developed for the lubrication of materials used in Earthmoving, Mines or Quarries, in hot climate areas.

TP Star Max HT 15W-40 together with Star Trans HT 85W-140 form the Star Concept "Hot Climate".

INTERNATIONAL STANDARDS

- 🔥 Engines : API CI-4 / CH-4
- 🔥 ACEA E7
- 🔥 GLOBAL DHD-1
- 🔥 JASO DH-1
- 🔥 Gearbox : API GL-4
- 🔥 Hydraulic systems: ISO VG 68 (after 100 working hrs) HV

SUITABLE FOR

- 🔥 Hydraulic System application :
- 🔥 ISO VG 68 HV (after 100 working hrs)
- 🔥 Suitable in place of following products :
- 🔥 JCMA HK 68W
- 🔥 KOMATSU HO-68
- 🔥 CASE MS 1230 "Hot Countries"

MEETS THE REQUIREMENTS OF

Engine application :

Conforms to the OEM's specifications for depolluted engines up to EURO Stage IIIa, US EPA TIER 3 or EURO V standards, like :

- 🔥 CATERPILLAR : ECF-2 VOLVO : VDS-3
- 🔥 CUMMINS : 20078 / 77 / 76 RENAULT : RLD-2
- 🔥 MTU : Category 2, MB, KOMATSU, HITACHI
- 🔥 MAN: 3275 etc...
- 🔥 NEW-HOLLAND: NH 330H

Gearbox application:

- 🔥 API GL-4

Conforms to the specifications:

- 🔥 ZF TE-ML 07D
- 🔥 CATERPILLAR TO-4M/TO-4
- 🔥 KOMATSU Clutch (TO-40)
- 🔥 ALLISON C4 etc

APPLICATIONS

TP Star Max HT can be used to lubricate diesel engines, in particular depolluted engines according to TIER 1, 2 and 3 or Europe Stage I, II and III standards.

Also suitable for small gasoline engines and piston compressors.

TP Star Max HT can be used in all hydraulic circuits, high or low pressure, equipped or not with ultra fine filters, at the pump's suction or discharge side.

TP Star Max HT also lubricates old or recent gearboxes, powershift or manual, as well as Transfer cases, when a fluid of SAE 30 or 40 grade is required.

TP Star Max HT can be used all year round, in cold periods (<0°C) or when temperatures are very high (50°C):

- 🔥 Unlike a "classic" 15W-40, TP Star Max HT has an enhanced viscosity to withstand very high temperatures or diesel dilution.
- 🔥 On the other hand, in cold periods (< 0°C) its patented formulation allows a quick start-up of cold sensitive components, such as those of the hydraulic system.

PERFORMANCES & CUSTOMER BENEFITS

Star Max HT 15W-40 is formulated using advanced technology base oil together with robust additives that provide enhanced lubrication performance.

- 💧 Simplification / Security
- 💧 Technical performance
- 💧 Self-adaptive, patented
- 💧 All types of diesel fuel
- 💧 Allows to strongly reduce the number of lubricants necessary for the maintenance of an equipment fleet and thus avoids any error of application of a product.
- 💧 Meets the highest performance required by manufacturers for their engines (E7/CI-4/DH-1), gearboxes (GL-4/TO-4) and hydraulics (HK/HV);
- 💧 Extends oil change intervals to the maximum allowed by the manufacturers;
- 💧 Self-adaptive, its patented formulation allows it to adapt to each component;
- 💧 High TBN for the use of biodiesel or diesel with high sulfur content (<0.7%)

CHARACTERISTICS*

TEST	UNIT	TEST METHOD	RESULT
Kinematic viscosity at 40°C	mm ² /s	ASTM D445	114
Kinematic viscosity at 100°C	mm ² /s	ASTM D445	15.7
Viscosity index	-	ASTM D2270	147
Pour point	°C	ASTM D97	-30
Flash point	°C	ASTM D92	228
T.B.N	mg KOH/g	ASTM D2896	13.2
Zinc value	ppm	-	> 1100

* 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 Lubricants / Last update of this datasheet: March 24 / TP Star Max HT 15W-40

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.