



TotalEnergies

Star Trans FE 75W-90

Star Concept

KEY DATA



Very high performance synthetic lubricant, specially developed for the lubrication of axles and final drive gearboxes of machinery used in Earthmoving, Construction, Mining or Quarries.

INTERNATIONAL STANDARDS

- 🔥 API GL-4/GL-5 (LS)/MT-1

MEETS THE REQUIREMENTS OF

- 🔥 CATERPILLAR FD-1 (SAE 50), CATERPILLAR FD-1 SYN
- 🔥 ZF TE-ML 05A, 05C, 07A, 17B

SUITABLE FOR

- 🔥 VOLVO 97310 / 97321
- 🔥 VOLVO CE G0101 / G0102
- 🔥 LIEBHERR SYNTOGEAR 75W-90 / GEAR BASIC 90LS
- 🔥 BELL GEAR OIL LS 80W-90
- 🔥 JCB HP 90 / HP LS
- 🔥 CNH NH520 A/B
- 🔥 BOMAG Excitor Oil 75W-90, ...
- 🔥 CATERPILLAR TO-4 (SAE 50), CATERPILLAR TO-4 TMS

APPLICATIONS

Star Trans FE 75W-90 makes it possible to lubricate front or rear strongly hypoid axles and loaded final reduction gears. Star Trans FE 75W-90 is usable in « Limited Slip » self-locking disc differentials (LIEBHERR, JCB, TEREX...).

In case of severe application, Star Trans FE 75W-90 has to be used with Star XL additive (Contact our Technical Services).

Star Trans FE 75W-90 can also be used in all types of gearboxes, with mechanical or synchronized shifting.

Star Trans FE 75W-90 is used to lubricate front or rear axles, highly hypoid, as well as the final drives of transmission components used in very severe operating conditions.

Star Trans FE 75W-90 has friction characteristics adapted to the applications in the axles of machines equipped with a self-locking differential with limited slip discs (LIEBHERR, JCB, TEREX...). In some cases of severe application, Star Trans FE 75W-90 must be used with Star XL additive (Consult our Technical Services).

Star Trans FE 75W-90 ensures smooth, vibration-free operation of oil-immersed disc brake systems, both hot and cold, when the manufacturer recommends SAE 90 (SAE J306) or SAE 50 (J300) viscosity grade.

Star Trans FE 75W-90 can be used all year round thanks to its high Viscosity Index:

Fluid when cold, allows an immediate and efficient use of the Transmission components, consuming less energy
Viscous when hot, maintains an optimal and safe lubrication of the loaded components, even in case of high temperatures.

PERFORMANCES & CUSTOMER BENEFITS

- Allows for a significant reduction in the number of lubricants required to maintain an equipment fleet.
- Meets the performance levels required by equipment manufacturers for severe construction site applications.
- Eliminates the possibility of misapplication of lubricant, in complete safety.
- Its enhanced "Extreme-Pressure" properties (GL-5) provide excellent load and impact resistance and extend the life of axles and final drives.
- Furthermore, its synthetic base oils are highly temperature resistant and generate fuel savings.

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 | 17.9 |
| Viscosity index | - | ASTM D2270 | 174 |
| Pour point | °C | ASTM D97 | -45 |
| Phosphorous minimum value | ppm | - | 2000 |

*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.



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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.