

# Star Trans 80W-110

Star Concept

## KEY DATA



Very high performance lubricant especially developed for the lubrication of Transmission & Final Drives used in public works, minings or quarries.

### INTERNATIONAL STANDARDS

- 🔥 API GL-5/GL-4
- 🔥 CAT FD-1
- 🔥 CAT TO-4

### SUITABLE FOR

- 🔥 LIEBHERR,
- 🔥 JCB, TEREX...

### MEETS THE REQUIREMENTS OF

- 🔥 CATERPILLAR FD-1 (SAE 50)
- 🔥 CATERPILLAR TO-4 (SAE 50)
- 🔥 KOMATSU Micro Clutch

## APPLICATIONS

Star Trans 80W-110 makes it possible to lubricate front or back strongly hypoid axles and loaded final reductions.

Star Trans 80W-110 is usable in limited slip self-locking disc differentials.

Star Trans 80W-110 permits also the cooling and the good work without vibrations of oil immersed brake systems.

Star Trans 80W-110 can also be used in all types of gearboxes, with mechanical or synchronized shifting

Star Trans 80W-110 is used all year round, due to its high viscosity index:

Very fluid at cold temperature permits a use of the final drive line, without power losses and with a break capacity immediately available and efficient.

Thick at high temperature, keeps an optimal and securized lubrication of loaded organs.

In certain application cases, Star Trans 80W-110 must be used in conjunction with the so-called "Star XL" additive (Refer to the Technical Data Sheet)

## PERFORMANCES & CUSTOMER BENEFITS

- 🔥 Allows to strongly decrease the lubricant number needed for the whole vehicle park maintenance.
- 🔥 Reaches the performance levels required by the machinery OEMs for the severe earth-moving applications.
- 🔥 Erases all mistake possibilities of lubricant application, with security.

## CHARACTERISTICS\*

TEST	UNIT	TEST METHOD	RESULT
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	182
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	18.6
Viscosity index	-	ASTM D2270	115
Pour point	°C	ASTM D97	-33
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.

