



Product Data

Transmax Universal LL 80W-90

Universal fluid for manual transmissions and axles

Description

Castrol Transmax Universal LL 80W-90 formulated with Smooth Drive Technology™ has excellent thermal and oxidative stability combined with superb temperature reduction. Protects against pitting. Its superior technology enables longer transmission life.

Advantages

- A single product for transmissions and final drives reducing inventory and the potential for misapplication.
- High temperature stability gives superior performance and extended drain potential.
- Proven performance as a problem solver in differentials operating in hot climates under arduous conditions.
- Optimised synchroniser performance gives smooth gear shifting at all temperatures.
- High shear stability maintains performance over the life of the lubricant.
- Excellent wear protection particularly at high temperatures extends component life and reduces maintenance costs.

Typical Characteristics

Name	Method	Units	Transmax Universal LL 80W-90
Density @ 15C, Relative	ASTM D4052	g/ml	0.893
Viscosity, Kinematic 100C	ASTM D445	mm ² /s	17.0
Viscosity, Kinematic 40C	ASTM D445	mm ² /s	168
Viscosity Index	ASTM D2270	None	108
Viscosity, Brookfield @ -26C (80W)	ASTM D2983	mPa.s (cP)	120000
Pour Point	ASTM D97	°C	-33
Flash Point, COC	ASTM D92	°C	214

Product Performance Claims

API GL-4/5
MAN 341 Z2, 341 GA1,
MAN 342 M2
MB-Approval 235.0
DTFR 12B100 (MB 235.0)
Scania STO 1:0, Scania STO 1:1G
Volvo Transmission Oil 97321-24-081
ZF TE-ML 02B, 05A, 12L, 12M, 16C, 17H, 19B, 21A
Recommended for use in Hino manual transmissions and differentials

Additional Information

Transmax Universal LL 80W-90 is registered under the following ZF approval numbers: ZF002143

Transmax Universal LL 80W-90
29 Jul 2025
Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Castrol (UK) Limited, PO BOX 354, Chertsey Road, Sunbury On Thames, Middlesex, TW16 9AW
Orders/Enquiries: 0845 6008125 Technical Enquiries: 0845 082 1719 BP (Ireland) Ireland Orders/Enquiries: 1850 930 3942 Ireland Technical Enquiries: 1800 509 353
www.castrol.com/uk