



## Universal 80W-90

Universal Fluid for manual transmissions and axles

### Description

Castrol Universal 80W-90 is a multipurpose gear lubricant for use in both synchronised manual transmissions and final drives and differentials where either API GL-4 or API GL-5 are specified.

Castrol Universal 80W-90 is particularly preferred for vehicles fitted with transaxles that combine gearbox and hypoid differential and for improved gearshift characteristics in gearboxes where SAE 80W-90 or 90 oils are normally used. It is also Castrol's prime recommendation for all transaxles that include both helical and hypoid type gears.

Castrol Universal 80W-90 is specially formulated to provide good synchroniser performance and with nearly 75W-90 type low temperature viscosity characteristics to help provide good shift performance in hot or cold where extreme pressure gear oils are specified.

### Application

Vehicles with combined transmission and hypoid differentials where Castrol Universal 80W-90 is recommended include the following:

- Alfa Romeo: Most models from 1975 onwards
- Porsche: All models except 924
- Subaru: All models from 1984 through to 2014
- Toyota: Most 4WD's and selected family passenger vehicles

Castrol Universal 80W-90 is recommended in place of SAE 80W-90 GL-4 or 5 gear oil where improved cold shift is desired. Also suitable in place of 75W-90 GL-4 or 5 in most applications.

Castrol Universal may also be used in axles of cars where SAE 80W-90 GL-5 is normally recommended. Also recommended for the secondary axle in 4WD drives for reduced friction and improved fuel efficiency.

It is preferable NOT to mix or add Castrol Universal 80W-90 with other transmission and final drive oils otherwise its performance will not be maximised.

Always ensure the correct transmission oil (as specified by the vehicle manufacturer) is used by referring to the vehicles' owner handbook or the Castrol Lubrication Reference Guide.

### 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.
- Optimised synchroniser performance gives smooth gear shifting at all temperatures.
- Excellent wear protection extends component life and reduces maintenance costs

## Typical Characteristics

Name	Method	Units	Universal 80W-90
Appearance	Visual	-	Bright and Clear-
Viscosity, Kinematic 100C	ASTM D445	mm <sup>2</sup> /s	15.2
Pour Point	ASTM D97	°C	-35
Viscosity, Brookfield @ -26C	ASTM D2983	mPa.s (cP)	20,000
Viscosity, Kinematic 40C	ASTM D445	mm <sup>2</sup> /s	112
Viscosity Index	ASTM D2270	None	142

## Product Performance Claims

API GL-4 / API GL-5

## Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

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