

Smart GL-5 80W-90 and Smart GL-5 85W-140

Automotive gear oil

Description

Smart GL-5 80W-90 and Smart GL-5 85W-140 are extreme pressure, multigrade gear lubricants designed for service in gearboxes, differentials and final drives, requiring a hypoid or extreme pressure lubricant.

Application

Smart GL-5 80W-90 and Smart GL-5 85W-140 were developed for the lubrication of spiral bevel and hypoid differentials, but are also suitable for the lubrication of manual transmissions where the manufacturer recommends the use of an oil to API GL5.

These oils meet the requirements of:

- ZF TE-ML 05A, 16B, 17B, 19B, (SAE 80W-90)
- ZF TE-ML 05A, 16D, 19B (SAE 85W-140)

Advantages

- Good thermal/oxidation stability which protects against the formation of harmful deposits and oil thickening, prolong the life of components and lubricant.
- Superior low temperature fluidity provides smoother gear shifting and differential operation in cold conditions.

Typical Characteristics

Name	Method	Units	Smart GL-5 80W-90	Smart GL-5 85W-140
Density @ 15°C, Relative	ASTM D4052	g/ml	0.886	0.905
Appearance	Visual	-	Clear & bright	Clear & bright
Kinematic Viscosity @ 40°C	ASTM D445	cSt	140	360
Kinematic Viscosity @ 100°C	ASTM D445	cSt	14.2	26
Viscosity Index	ASTM D2270	None	99	95
Viscosity, Brookfield @ -26C (80W)	ASTM D2983	mPa.s (cP)	<150,000	-
Viscosity, Brookfield @ -12C (85W)	ASTM D2983	mPa.s (cP)	-	<150,000
Pour Point	ASTM D97	°C	-30	-15
Flash Point, COC	ASTM D92	°C	-	>200
Flash Point, PMCC	ASTM D93	°C	176	-

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

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.