PRODUCT DATA SHEET

TRANSMISSION FLUID





PENTOSIN FFL-4

Fully Synthetic Double Clutch (DCT) Transmission Fluid

DESCRIPTION

Pentosin FFL-4 is the only approved first fill and service fill transmission fluid for the new generation of BMW double clutch gear transmissions (DCT). Pentosin FFL-4 is founded on a fully synthetic base oil technology for safe operation at even the highest thermal load. FFL-4 features a special clutch friction performance which makes it mandatory to be applied solely to the double clutch gear box — do not mix with any other gear oils.

Pentosin FFL-4 is also recommended for BMW with ZF and Getrag manual transmissions (1997 on) and Hyundai Genesis (2010 on). It improves synchronization characteristics and helps provide better fuel economy.

SIZE	PART NUMBER	GTIN-13
1 Liter	1080107	4008849173332
20 Liter	1080208	4008849173431

PRODUCT AT	TRIBUTES
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Appearance	Amber & Clear
Density at 15°C	842 kg/m ³
Density at 20°C	839 kg/m ³
Kinematic Viscosity at 100°C	7 mm²/s
Kinematic Viscosity at 40°C	34.7 mm²/s
Kinematic Viscosity at 20°C	83.9 mm²/s
Viscosity Index	168
Dynamic Viscosity at -40°C	7400 mPa*s
Pour Point	-54°C/-65.2°F
Flash Point	220°C/428°F
pH Value	N/A

OE REFERENCE NUMBERS	
Make	Reference Number
BMW	83 22 0 440 214
BMW	83 22 2 147 477
BMW	83 22 0 309 031
BMW	83 19 2 344 627
Hyundai	00232-19041
Hyundai	00232-19042

APPROVALS/SPECIFICATIONS	i
API	GL-5



Always consult the vehicle owner's manual to identify fluid specification requirements. MSDS available to professional repair technician upon request.

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