

## **Pentosin FFL-2**

Double Clutch Transmission Fluid for VW: only approved First Fill and Service Fill Transmission Fluid for the new generation of double clutch gear transmissions from VW and Audi cars

## **Description**

**Pentosin FFL-2** is a special fully synthetic transmission fluid, which has been exclusively developed for the application in the new VOLKSWAGEN double clutch transmission. This transmission - VOLKSWAGEN designation: DSG - is a highly developed, complex high tech aggregate, which creates extremely demanding requirements for the transmission fluid.

The system has its origin in the motor sports area. The gears are shifted automatically and therefore very fast. For perfect operation the DSG needs an adequate special high tech transmission fluid with constant stable specific friction characteristics that do not change even under most severe operating conditions, both in winter and in the hottest summer when racing on the motorway. **Pentosin FFL-2** has been completely new developed to satisfy the high VW DSG– requirements. Together with VOLKSWAGEN it has been adjusted to comply with the various challenging specific DSG–performance requirements. In order to ensure perfect DSG-operation it should therefore by all means be avoided that **Pentosin FFL-2** is being mixed with any other transmission fluid.

## **Approvals**

VW TL 521 82

## **Classification**

The product is not classified as dangerous.

Pentosin FFL-2	Typical Data		
	Unit	Result	Method
Appearance		bright and clear	DIN 10964
Density at 15 ℃	kg/m³	845	DIN EN ISO 12185
Kinematic Viscosity at 100 °C	mm²/s	7,3	DIN EN ISO 3104
Kinematic Viscosity at 40 °C	mm²/s	36,3	DIN EN ISO 3104
Viscosity Index		173	DIN ISO 2909
Dynamic Viscosity at -40 ℃	mPa*s	12100	ASTM D2983
Flash Point COC	°C	224	DIN EN ISO 2592
Pour Point	°C	-51	ISO 3016
Evaporation Loss 1h at 200 °C	mass %	2	DIN 51 581-1
Taper Roller Bearing Test, shear loss (20h)	%	8,2	CEC-L-45-A-99
Taper Roller Bearing Test, Viscosity after Shear (20h)	mm²/s	6,76	CEC-L-45-A-99
FZG Wear Test A/8.3/90 // A/16.6/90	Failure Load Stage	>12 // >12	DIN EN 14635-1

While handling lubricants the relevant safety rules have to be taken into account. For more detailed information please see the current safety data sheet for this product.

This product may not be available at all locations. For more information, please call us at +49 4103-9134-0 or visit us at **www.pentosin.com** Due to continual product research and development, the information contained herein is subject to change without notification. Typical data may vary slightly.