

PRODUCT NAME: LA 462 MANUAL GEARBOX AND TRANSAXLE GEAR OIL

**SAE VISCOSITY**: 70W-85

**MAJOR RATINGS:** GL-5

### **DESCRIPTION**

LA462 is an Ultra-high performance, shear stable manual gearbox & transaxle oil formulated from *PAES-SYN™* oil with superior high temperature stability, durability and protection advancing extreme pressure API GL-5 requirements.

### **APPLICATION**

LA462 improves the performance and shift capabilities of on-highway vehicles for passenger cars, 4WD's, light and heavy duty commercial trucks where an SAE 80 or 85 GL-5 viscosity oil is approved. Excellent protection for shock loading of towing and hauling operations in off-highway industries including construction, quarrying and agricultural.

# **ADVANCED SYNTHETIC FORMULA**

LubeAlloy Specialised Lubricants proprietary blend of *PAES-SYN™* synthetic base oils, are formulated to enhance power transfer shift life and durability, exceeding OEM requirements.

# **EXTENDED OIL SERVICE-OXIDATION RESISTANT**

LA 462 retains an inherent ability to run cooler. This inherent thermal stability provides a cleaner, cooler and oxidation resistant oil. This desirable attribute provides extended oil drain periods and long term metal protection against metal expansion in contact points.

#### **WEAR PROTECTION**

The combination of PAES-SYN™ base oils and highly advanced additive technology utilised in LA 4602 provides a resilient oil film to protect synchromesh dog teeth, driven speed gears and shaft bearings when operated under stop-start city driving, long distance highway driving and towing loads.

#### FOAM CONTROL WITH WEAR PROTECTION

LA 462 contains anti-foam chemistry that provides a resilient oil film at low and high temperatures. Elasto-hydrodynamic lubrication (EHD-L) provided from the *PAES-SYN™* oils resist oil film shear and rupture under high torque, sliding and rolling load. This characteristics retains separation between various metallurgical opposing surfaces to increase transmission life and productivity.

## **RUST AND CORROSION PROTECTION**

The patented chemistry of LA 462 provides outstanding hydrophobic properties that prevent oxidisation of ferrous & non-ferrous yellow metals, protecting against rust and corrosion.



# **FEATURES & OPERATIONAL BENEFITS**

FEATURES	ADVANTAGES AND OPERATIONAL BENEFITS	
Exceptional high temperature thermal stability High Shear Stability/High Viscosity Index	Increased transmission high temperature operating capability. Retains viscosity and film thickness at high temperatures Provides exceptional low temperature performance	
High load carrying efficiency Balanced additive chemistry	Protects metal surfaces under heavy and shock loads.  Delivers exceptional performance in relation to rust and corrosion prevention, water separability, foam control and air release performance.	
Yellow Metal Oxidation Resistant Anti-Oxidant Protection	Protects non-ferrous metal surfaces from corrosive elements Ensures lubricant life is protected from acid attack and viscosity increase	
Increased gear tooth and bearing durability	Extends component life of input shaft bearings, synchromesh 'dog teeth' and driven speed gears.	

# **SPECIFICATIONS & PERFORMANCE REQUIREMENTS**

API	GL-5	
FORD	M2C94-A	
MERCEDES BENZ/ DAIMLER CHRYSLER	MB 235.7	
MILITARY	ML-L-2105, CS3000A/B	
VOLKSWAGON GROUP	TL 521-45-X (G 052 145 A1), TL 521 90 (G 052 190 A2/G 055 190 A2)	
ZF	TE-ML 18	



### **TYPICAL PROPERTIES**

TEST DESCRIPTION	ASTM	TEST RESULT
Description	Visual	Clear/Amber
Viscosity Grade	SAE	70W/85
Viscosity, cSt @ 40°C	D-445	71.8
Viscosity, cSt @ 100°C	D-445	12.9
Viscosity Index	D-2270	182
Density @ 15°C, kg/L	D-4052	0.860
Flash Point, Cleveland Open Cup,(COC), °C	D-92	240
Pour Point, °C	D-5950	-42
FZG Gear Test	IP 334	>10
Viscosity, Brookfield, cP @ -40°C	D-2983	17,260

**Health and Safety:** This product is not expected to cause health concerns when used for the intended application and according to the recommendations in the Material Safety Data Sheet (MSDS).