

# **TECHNICAL DATA SHEET**

# MULTIPLUS® ENCLOSED GEAR OIL

Whitmore's Multiplus® Enclosed Gear Oils are extreme pressure lubricants formulated to meet the exacting demands of most types of automotive differentials and transmissions including heavy-duty off-road fleets.

Multiplus® is designed to perform under adverse conditions such as: heavily loaded gears, shock loading, and frequent reversing action. All Multiplus® products meet the performance requirements of extreme pressure lubricants of the American Gear Manufacturer's Association (AGMA) Specification 9005-D94 "Lubrication of Industrial Enclosed Gearing."

Multiplus<sup>®</sup> lubricants meet or exceed the following specifications for the respective viscosity grades:

U.S. Steel Spec 224	Rockwell D-76 (A,B,C,D,F)
GL-4 & GL-5	GM Spec 9985044
MIL-L-2105E	GM Spec 9985182
John Deere J11D	Chrysler MS 9020
Navistar (IHC) Grades 81 HR,	CS 3000 B
90HR, 135 HEP	
Ford EST-M2C-108-C	MT-1
Mack GO-J	

## **BENEFITS:**

- REDUCES WEAR protects against scoring, scuffing and galling to increase gear and bearing life.
- VERSATILE may be used in a variety of equipment and mixed fleets. Reduces inventory.
- ANTIFOAM protects seals and keeps operating temperatures low by breaking up entrapped air bubbles as they form.
- RAPID DEMULSIFICATION separates easily from water.
  Multiplus® does not lose lubricity due to emulsified water.

#### APPLICATIONS:

Multiplus® is designed primarily for automotive differentials and transmissions. Multiplus® may be used in severe service over-theroad and off-road applications. It may also be used in industrial gearboxes, oiled bearings, and couplings. Suitable for service-fill on equipment requiring a lubricant with Limited Slip characteristics.

ASTM #		TYPICAL CHARACTERISTICS		
	SAE Grade	80W-90	85W-140	
D-445	Kinematic Viscosity			
	cSt @ 40°C	220	380	
	cSt @ 100°C	19	30	
D-2161	Saybolt Viscosity			
	SUS @ 100°F	1,012	2,020	
	SUS @ 210°F	100	150	
D-2270	Viscosity Index	119	111	
D-97	Pour Point, °F (°C)	-20 (-29)	0 (-18)	
Gardner	Density, lb/gal @ 60°F (°C)	7.45	7.55	
Method	Specific Gravity, g/cc @ 60°F (°C)	0.894	0.906	
D-92	Flash Point, °F (°C) Cleveland Open Cup	400 (204)	400 (204)	
D-2782	Timken OK Load, lb	55	60	
D-2783	Four Ball EP			
	Weld Point, kg	400	400	
	Load Wear Index	50	50	
D-4172	Four Ball Wear			
	Scar Width, mm @ 40 kgf	0.33	0.35	
D-665	Rust Test			
	Distilled Water	Pass	Pass	
D-130	Copper Strip Corrosion	1B	1B	
	212°F (100°C) @ 3 hr			
	Color	Red	Red	
D-2711	Demulsibility: Modified for 90 ml Water	Pass*	Pass*	

<sup>\*</sup> Applies to U.S. Steel Specification Number 224.

The above are average values. Minor variations which do not affect product performance are to be expected in normal manufacturing.

### **PACKAGING**

Shuttle Tanks	Nonreturnable Totes	Drums	Kegs	Pails	Jugs 4 per case
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For warranty information, scan the QR code. You can also email us at <a href="mailto:sales@whitmores.com">sales@whitmores.com</a> Or write to the Sales Department at the address below.

930 Whitmore Drive • Rockwall, Texas 75087 • USA • (972) 771-1000 • 800-699-6318 An ISO 9001 and ISO 14001 registered company • www.whitmores.com

