

FUNCTIONAL EP-203

Extreme Pressure Top Treat for Gear Oils

APPLICATION:

FUNCTIONAL EP-203 is synergistic blend of additives engineered to elevate the performance of automotive and industrial gear oils and greases including those using oil-soluble molybdenum like MoDTC, MoDTP, and MoDDP liquid additives. **FUNCTIONAL EP-203** has been tuned for full synthetic formulations to provide EP protection without corrosion to ferrous or yellow metals.

COMPOSITION:

FUNCTIONAL EP-203 is a mixture of 100% active ingredients for extreme pressure protection.

Typical Properties	
Appearance	Red to Brown
Color, ASTM D1500	≤ 5.0
Density (lb/gal)	8.7 - 8.8
Specific Gravity @ 60°F	1.02
Flashpoint, ASTM D92 COC	≥ 110°C / 230°F
Copper Strip Corrosion, ASTM D130 (3hrs, 100°C; 3% in PAO4)	1b

4-Ball EP Weld Load (D2596) by treat in 150N Paraffinic Oil			
EP Weld Load	250 kg	315 kg	400 kg
wt%	1.0	2.0	4.0

TREATMENT LEVEL:

Recommended starting treat rate is 1.0wt%. Up to 4.0wt% may provide further enhancement to extreme pressure in testing like 4-ball EP (D2783), Falex EP (D3233), and Timken OK load (D2782).

Performance will vary depending on the overall formulation including gear oil package and any other EP additives including molybdenum, phosphorus, or sulfur compounds.

HANDLING:

FUNCTIONAL EP-203 pours readily. Store in a cool, dry place.

Wear personal protective equipment when handling. See the current Safety Data Sheet before use.

FUNCTIONAL EP-203 adds no hazards to the finished lubricant at typical treat rates.

This Technical Data Sheet and the Safety Data Sheet contain information believed to be accurate and reliable. No warranty is made, however, to information beyond the control of FUNCTIONAL PRODUCTS INC. The engineering and management personnel of the user are responsible for determining the suitability of this or any product for any specific application, and this information is offered to them for that purpose.

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