

## TECHNICAL DATA

### PAR INDUSTRIAL GEAR OILS

#### DESCRIPTION

PAR Industrial Gear Oils have been formulated to meet the lubrication requirements of a wide range of gear tooth form configurations, such as spur, bevel, helical, double helical, worm, spiral bevel and hypoid.

PAR Industrial Gear Oils have excellent anti-wear and EP properties, improved oxidation and corrosion resistance, demulsibility and anti-foam characteristics.

#### PERFORMANCE SPECIFICATIONS

PAR Industrial Gear Oils are capable of meeting the performance limits expressed by all current industrial gear oil specifications, including:

- Cincinnati Millicron EP Gear Lubricants P59 & P63
- Extreme Pressure Oil - US Steel Requirement No 220 & 221
- Extreme Duty Oil - US Steel Requirement No 222
- AGMA Mild EP Gear Lubricants
- Public Authority Standard PAS 06-04 GSP
- David Brown Gears Specification ET 19
- ALCOA-ML S10-S12-S14

David Brown Grade	PAR ISO Grade
No. 1 EP	/
No. 2 EP	68
No. 3 EP	100
No. 4 EP	150
No. 5 EP	220
No. 6 EP	320
No. 7 EP	460
No. 8 EP	680

#### APPLICATIONS

PAR Industrial Gear Oils may be safely recommended for all enclosed gear applications, providing the correct viscosity grade is selected. Particularly recommended in situations where extreme pressure (EP) characteristics are required and high operational temperatures are experienced.

Recommended for steel mill gearbox applications where shock loading conditions impose special stresses.

#### TYPICAL PHYSICAL PROPERTIES

Grade	68	100	150	220	320	460	680
ISO Viscosity Grade	68	100	150	220	320	460	680
Specific Gravity @ 15°C	0.836	0.893	0.895	0.898	0.901	0.911	0.900
Kinematic viscosity @ 40°C, cSt	68	100	150	220	320	460	680
Kinematic viscosity @ 100°C, cSt	8.2	11.8	13.5	17.9	23.5	31.4	35
Viscosity Index (VI)	98	97	100	95	95	92	80
Pour point, °C	-15	-15	-15	-15	-15	-15	-12
Closed Flash point (PMCC), °C	190	200	205	210	218	225	230

#### HEALTH & SAFETY

Please refer to Material Safety Data Sheet (MSDS).