Industry

Lubricants for industry.

Gear HP

Mineral lubricant with extreme pressure sulfur-phosphorus additives, developed for all types of industrial steel gears in closed sumps.

Use

- Gear HP is especially recommended for all types of industrial steel gears in closed sump applications, operating under severe service conditions and subjected to high shock loads or high constant or intermittent stresses, including those operating at very high loads and speeds.
- Its excellent extreme-pressure additive package based on sulfur and phosphorus makes it suitable for use in heavily loaded bearings and low-speed applications, for splash, bath, or oil mist lubrication.

Benefits

- Limits power loss due to friction. Smooth, uniform, and quiet gear operation under limiting lubrication conditions.
- Enables controlled running-in by preventing the gear teeth from seizing up
- High resistance to the formation of foam and emulsions with water.
- Excellent low-temperature start.
- High protection against corrosion and rust in the presence of moisture.
- Highly resistant to oxidation.
- Significantly increases oil change periods, due to its high oxidation stability and easy water separation.

Specifications

- DIN 51517 Part 3 CLP
- AIST 224
- IBERCISA (ISO 220 and 320)
- ISO 12925-1 Type CKC / CKD
- DAVID BROWN S1.53.101 Type E
- AGMA 9005-F16 AntiScuff
- FIVES CINCINNATI P-Specs

Physical and chemical properties

Parameter	Units	Method	Gear HP						
ISO Grade	-	-	**68**	**100**	**150**	**220**	**320**	**460**	**680**
Viscosity at 40 °C	cSt	ASTM D-445	68	102	149	217	318	458	676
Viscosity at 100 °C	cSt	ASTM D-445	8.6	11.4	14.7	18.8	24.0	30.7	40.4
Viscosity index	-	ASTM D-2270	97	98	97	97	96	97	99
Density 15 °C	kg/l	ASTM D-4052	0.885	0.891	0.896	0.899	0.904	0.907	0.908
Flash point COC	°C	ASTM D-92	>210	>215	>215	>220	>220	>225	>230
Pour point	°C	ASTM D-97	-27	-21	-21	-21	-12	-12	-12
Timken load ok	lb	ASTM D-2782	60	60	60	60	60	60	60
FZG test, failure stage	-	DIN 51354-2	>12	>12	>12	>12	>12	>12	>12
4 balls (D footprint, max)	mm	ASTM D-2266	0.35	0.35	0.35	0.35	0.35	0.35	0.35

Health & safety and environment

A Material Safety Data Sheet providing information on product hazards, handling precautions, first aid measures, and relevant environmental data is available for this product as per applicable legislation.