

# **Mobilgear 600 Series**

Premium Heavy Duty Industrial Gear Lubricants

#### **Product Description**

The Mobilgear 600 Series are premium quality gear oils having outstanding extreme pressure characteristics and load-carrying properties, intended for use in all types of enclosed gear drives with circulation or splash lubrication systems. They are formulated from highly refined paraffinic base stocks and a unique additive system which provides an extremely high level of resistance to oxidation and chemical degradation. They have friction-modifying characteristics which reduce power consumption and lower bulk oil temperatures. The Mobilgear 600 Series oils protect against corrosion and rusting in both the liquid and vapor phases. They have excellent water separating properties and they are strongly resistant to foaming in service.

#### Benefits

Mobilgear 600 Series lubricants offer the following benefits:

- Lower operating costs, higher productivity and longer machine life because of outstanding anti-wear characteristics and reduced power consumption
- Extended lubricant life with lower lubricant and lubrication costs and reduced scheduled downtime
- Fewer grades of lubricant required because of wide range of application, leading to lower purchase and storage costs and less danger of using wrong lubricant
- Reduced gear tooth wear due to excellent load-carrying properties
- Superior protection against rust and corrosion of copper and bearing metal
- Good lubrication in the presence of water due to marked resistance to foaming and emulsion formation
- Cleaner systems because of minimal sludge and deposit formation resulting from outstanding resistance to oxidation
- Reduced maintenance and repair costs

### **Applications**

Mobilgear 600 Series oils are recommended for industrial closed gears with circulation or splash lubrication, operating at bulk oil temperatures up to  $110^{\circ}C$ . (For worm gears operating at bulk temperatures higher than  $95^{\circ}C$ , Mobil Glygoyle HE Series or Mobil SHC 600 Series products are recommended). They are particularly suitable for gear sets working under heavy or shock loads. Minimum bulk oil temperatures are governed by the pour point of the oil. Suitable heating may be

necessary for the heavier grades at ambient temperatures.

Non-gear applications include shaft couplings, screws and heavily loaded plain bearings operating at slow speeds.

## Typical Properties

Mobilgear 600		626	627	629	630	632	633	634	636
Product Code		970633	970487	970874	970984	970563	973828	970432	970393
	Test								
T.C.O. 1/C	Method		100	450	000	200		440	400
ISO VG	4.CT44	68	100	150	220	320	-	460	680
Viscosity	ASTM D445								
cSt at 40° <i>C</i>		64	95	143	207	304	351	437	636
cSt at 100°C		8.2	10.7	14.1	18.1	23.2	26.5	27.1	33.1
Viscosity Index	ASTM D2270	95	95	95	95	95	95	90	90
Specific Gravity	ASTM D1298	0.88	0.89	0.90	0.90	0.91	0.91	0.91	0.92
Flash Point, °C	ASTM D92	224	225	228	230	240	249	240	242
Pour Point, °C	ASTM D97	-24	-24	-24	-18	-18	-12	-6	-6
Rust Protection	<i>AS</i> TM D665								
Distilled Water Syntheti		Pass							
c Sea Water		Pass							
Foam Test	<i>AS</i> TM D892								
Sequence I, ml	2	Tr/0							
Timken OK Load, lbs	ASTM D2782	60+	60+	60+	60+	60+	60+	60+	60+
FZG Gear Test,	DIN 51354								
Failure Stage		12+	12+	12+	12+	12+	12+	12+	12+
4-Ball Wear,	ASTM	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
scar mm	D2266								
4-Ball Weld	ASTM	250	250	250	250	250	250	250	250

Load, kg	D2783								
Load									
Wear		48	48	48	48	48	48	48	48
Index									
Color	ASTM D1500	4.0	5.0	5.5	6.0	6.0	6.0	6.5	8.0
AGMA No.		2EP	3EP	4EP	5EP	6EP	6EP	7EP	8EP

#### Health & Safety

Based on available toxicological information, these products produce no adverse effects on health when properly handled and used. No special precautions are suggested beyond attention to good personal hygiene, including laundering oil-soaked clothing and washing skin-contact areas with soap and water. Additional health and safety information on these products, including Material Safety Data Bulletins, is available on request from your local Mobil company.