



SL Gear Oil Heavy Duty is a "eutectic" type gear oil formulated for use in many gearboxes, but especially where excessive wear and short component life drive up operating costs. Inadequately lubricated gears and bearings can experience scuffing under high load. Scuffing occurs when the tips of opposing asperities momentarily weld. The anti-wear additive system used in SL Gear Oil Heavy Duty reduces scuffing by forming a protective chemical layer in the area of contact. The surfaces continue to experience high load, but rather than micro welding, they are made smoother by the pressure.

The eutectic smoothing effect of SL Gear Oil Heavy Duty will also partially flatten pre-existing wear damage, usually within a few hundred hours of operation. Condemned equipment may stay in service indefinitely, or until a scheduled shutdown.

Pitting is also reduced by the use of SL Gear Oil Heavy Duty. Pitting is caused by metal fatigue and metal fatigue is minimized when the load is carried by a smoother surface. Some "initial pitting" may still occur when SL Gear Oil Heavy Duty is used, especially where there is misalignment.

APPLICATIONS

- Gearboxes where conventional gear oils fail.
- Gearboxes where long component life is essential.
- Gearboxes where long intervals between oil changes are unavoidable.

BENEFITS

- **Wear protection**
Reduces wear under a wide variety of operating conditions, including severe load.
- **Smoothing of surfaces**
Smooths contact surfaces of bearings and gears under load.
- **Long component life**
Laboratory testing has revealed extremely low wear and friction levels using SL Gear Oil Heavy Duty.
- **Long oil life**
Highly resistant to oxidation, a major cause of reduced lubricant life.
- **Rust protection**
Leaves a film on gears that remains in place during long shutdown periods. This coating prevents rust and ensures a lubricating film at startup.
- **Clean**
Light coloured oil with low-sludge additive system ensures components remain clean and free of deposits for years of operation.

PERFORMANCE STANDARDS

SL Gear Oil Heavy Duty meets the requirements of DIN 51517-3.



TYPICAL CHARACTERISTICS

Product Code			3256	3218	3219
Method	Test	UOM	460	1000	1500
D445	Kinematic Viscosity 40°C 100°C	cSt cSt	460 36.6	1000 61.5	1539 83.1
D2270	Viscosity Index		120	120	123
Gardener	Specific Gravity @ 15.5°C	g/cc	0.881	0.902	0.909
D130	Copper Corrosion		1B	1B	1B
D92	Flashpoint, Open Cup	°C	204	243	243
D4172	Four Ball Wear Scar @40kgf	mm	0.40	0.40	0.40
	FZG Test, Stages Passed		> 12	> 12	> 12
D2893	Oxidation, Viscosity Change	%	< 6	< 6	< 6
D97	Pour Point	°C	-11	-12	-12
D665	Rust Test, distilled water		Pass	Pass	D665
D2782	Timken OK Load	lb	70	70	70

PACK SIZES

185kg

ENVIRONMENT, HEALTH and SAFETY

Users should consult the MSDS, follow the precautions outlined and comply with all laws and regulations concerning its use and disposal. Used packaging material should not be incinerated or exposed to flame. After use, protect your environment. Do not pollute drains, soil or water with used product.

OTHER INFORMATION

For further information on Caltex products and services call the Technical Solutions on 1300 364 169.

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