



Energyn SG 150

Synthetic Gear Lubricant

Description; Description

Energyn SG 150 is a fully synthetic lubricant with a high VI. It is based on carefully selected polyglycols and

contains anti-oxidant and rust-inhibiting additives of high thermal stability.

Applications; Applications

Because of its inherently superior properties relative to mineral lubricants, Energyn SG 150 is especially suitable for high-temperature lubrication of gears and bearings particularly in large-scale mills and calenders.

In worm gears operating with mineral oil at low speeds and high torques, conditions of boundary lubrication tend to promote pitting and consequent rapid wear of bronze worm-wheels. Fatty oils (also known as compounded oils) were found to be effective in reducing pitting, but suffered from rapid oxidation at high running temperatures. Energyn SG 150 is not only suitable for these applications, but provides scope for extended drain intervals. When used in worm gears, Energyn SG 150 permits sump temperatures up to 140 °C.

Energyn SG 150 carries the latest David Brown Approved Lubricants Type G approval, it is also approved for use in Foden rear axles and may be used in Kirkstall worm driving heads and where other manufacturers recommend

a synthetic product of this type.

Energyn SG 150 is compatible with other polyglycols and may be added to equipment containing a similar product.

IT MUST NEVER BE MIXED WITH MINERAL OILS - when changing from a mineral oil to Energyn SG 150 it is necessary to flush equipment carefully before refilling.

Ordinary industrial paints soften in the presence of this product. Internal gearbox surfaces should be left unpainted or, alternatively, coated with two-pack epoxy formulations.

Common seal and gasket materials are compatible with Energyn SG 150. Nitrile rubber (NBR), fluoro-silicone or vinyl-methyl-polysiloxane rubber (VMQ) are recommended, particularly where higher temperatures are involved. Seals previously exposed to mineral oil may shrink on exposure to this product. For this reason it may be useful to change seals and gaskets on equipment before replacing a mineral oil with a synthetic product.

Main Benefits; Main Benefits

- Reduced frictional losses, leading to lower sump temperatures and higher gear efficiency.
- Improved load-carrying properties and reduced wear.
- Higher thermal stability, minimal sludge and deposit formation

- Inherently higher Viscosity Index (VI) plus low pour point enable equipment to operate over a wider range of service temperatures.

Storage; Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and the obliteration

of drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.; of drum markings. Products should not be stored above 60°C, exposed to hot sun or

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Health, Safety and Environment; Health, Safety and Environment

Health, safety and environmental information is provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products.; Health, safety and environmental information is provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products.

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Typical Characteristics; Typical Characteristics

	Test Methods; Test Methods	Units; Units	Grade ;; Grade :
Density at 15 °C	ISO 3675, ASTM D1298	kg/m ³	150 1000
Flash Point (COC)	ISO 2592, ASTM D92	°C	260
Viscosity KV @ 40 °C	ISO 3104, ASTM D445	mm ² /s	133 21
Viscosity Index	ISO 2909, ASTM D2270		184
Pour Point	ISO 3016, ASTM D97	°C	-30
Neutralisation Value	ASTM D974	mgKOH/g	0.6
Foam Tendency / Stability			
Sequence I : 24 °C	ASTM D892	ml	10/nil
Sequence II : 93.5 °C			10/nil
Sequence III : 24 °C after Sequence II			10/nil
Copper corrosion 3h 100 °C	ISO 2160, ASTM D2270		1
Corrosion - rust protection	ISO 7210, ASTM D665 A		no rust
FZG gear test : A/8.3/90 °C	IP334, DIN 51 354	pass stage	12

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

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