

# SHELL GADINIA

LUBRICANTS FOR MEDIUM-SPEED MARINE DIESEL ENGINES RUNNING ON DISTILLATE FUELS

DESIGNED TO MEET CHALLENGES

Shell Gadinia are premium quality multi-functional diesel engine lubricants that are specially designed for the most severe service main propulsion and auxiliary marine trunk piston engines burning distillate fuels with a sulphur content up to 1%. They also perform satisfactorily in smaller high speed engines of fishing fleets that operate under arduous conditions and have small sumps.

## PERFORMANCE FEATURES

### ENGINE RELIABILITY

- n Great tolerance to engine overload or poor combustion due to improved piston cleanliness.
- n Reduced deposits in piston ring belt and cylinder liners.

### CONTROL MAINTENANCE COSTS

- n Designed to extend diesel engine life through helping to reduce the risk of ring sticking and breakage.
- n Formulated for long oil life, especially in high stress engines, because of Shell Gadinia's excellent resistance to oxidation and thermal degradation under severe operating conditions.
- n Superior protection against corrosion for all engine components, due to Shell Gadinia's unique formulation giving excellent alkalinity retention.
- n Control of liner lacquer assists in the control of oil consumption and helps to minimise the cost of operation.

### RE-ASSURANCE

- n Great safety margin to protect highly loaded bearings, in the event of water contamination, because of Shell Gadinia's water tolerance and separation in separators.
- n OEM endorsement by leading diesel engine manufacturers following extensive field approval trials, means that Shell Gadinia is suitable for a range of modern diesel engines.

## APPLICATIONS

- n Highly rated, medium speed, main propulsion and auxiliary trunk-piston marine diesel engines.
- n Turbochargers, oil filled stern tubes and variable pitch propellers.
- n Deck machinery and other marine applications requiring SAE 30 or 40 viscosity oils.

## SPECIFICATIONS, APPROVALS AND RECOMMENDATIONS

MEETS THE ENGINE TEST CRITERIA FOR:

- n API CF.

RECOMMENDED FOR USE IN:

- n Trunk piston engines.

## TYPICAL PHYSICAL CHARACTERISTICS

CHARACTERISTICS	30	40
Kinematic Viscosity (ASTM D 445, IP 71) @ 40°C mm <sup>2</sup> /s	104	139
@ 100°C mm <sup>2</sup> /s	11.8	14.4
Flash Point (PMCC) °C (ASTM D 93, IP 34)	200+	225+
Density @ 15°C kg/m <sup>3</sup> (ASTM D 4052, IP 365)	0.897	0.900
Pour Point °C (ASTM D 97, IP 15)	-18	-18
Total Base Number mg KOH/g (ASTM D 2896, IP 276)	12	12
Sulphated Ash % wt (ASTM D 874, IP 163)	1.35	1.35