

# Raysun Merga

### High performance medium ash natural gas engine oils

Raysun Merga series are high performance gas engine oils intended for use in highly-rated four-cycle spark ignited and "dual fuel" natural gas engines requiring "medium ash" oil or where "sour gas" is in use. They are specially developed to meet the requirements of the newer lean-burn engines and also to protect against wear and acid attack from the acidic materials generated during combustion. They are formulated from specially selected balanced package of additives to provide medium ash (0.9%), high TBN and low levels of phosphorus and zinc. The exceptional reserve alkalinity offsets the negative effects of corrosive materials on engine components and prevents corrosive wear in cylinders, valves and bearings resulting in longer engine life and lower maintenance costs. They exceed the performance requirements of API CF and are available in two viscosity .grades viz. SAE 30 and SAE 40

#### **Advantages**

- Provides excellent engine cleanliness and improved performance •
- Prevents corrosive wear in cylinders, valves and bearings resulting in longer engine life and lower maintenance costs
- High oxidation and nitration resistance make these oils an excellent choice in many engines operating under high load and high temperature conditions
  - Extended oil drain intervals and reduced oil filter costs
    - Protects against valve seat recession •
  - Protects against wear and minimizes ring scuffing of heavily loaded gas engines
  - Minimizes combustion chamber ash formation and improves spark plug performance
  - Compatible with emission catalyst as it is formulated with less than 300 ppm phosphorus content •

#### **Applications**

- (Gas engines operating on fuel containing moderate levels of hydrogen sulphide (H<sub>2</sub>S •
- Engines operating on fuel containing corrosive components such as TOHCL (Total Organic Halides as Chlorides), landfill or biomass gases
  - Dual-fuel" gas engines ignited by diesel pilot fuel"
  - Two-cycle and four-cycle gas engines that require medium ash oils •
- Systems with catalytic converters used in both field pumping and cogeneration units Superior and lean-burn Waukesha engines

## **Specifications**

API CF



# Raysun Merga

SAE Viscosity Grade		ASTM Method	Specification
40	30		
0.878	0.873	D 1298	Density @ 15°C, kg/l
14.2	11.2	D 445	Viscosity @ 100°C, cSt.
97	98	D 2270	Viscosity Index
244	238	D 92	Flash Point, °C
-15	-18	D 97	Pour Point, °C
8.6	8.6	D 2896	TBN, mg KOH/g
0.9	0.9	D 874	Sulphated Ash, % wt
<300	<300	D 4927	Phosphorus, ppm

Note: "All of the results are typical and the results of each batch are presented in the COA sheet."