

# **MAK GES 2S 40**

# Ashless engine oil for 2-stroke stationary gas engines

MAK GES 2S 40 is a premium quality oil blended for use in 2-stroke and spark-ignition stationary gas engines requiring ashless type of oil. It has been blended from high viscosity index base stock and special additive chemistry. It is highly resistant to nitration, thermal degradation and oxidation which can cause filter deposits, viscosity increase and acid build-up. It offers very high control of wear of engine components. MAK GES 2S 40 oil offers excellent film strength, lubricity and protection to engine components against rust and corrosion. It is also designed to maintain exceptional engine cleanliness, prevention of filter blockage and port plugging in a 2-stroke engine.

### **Applications:**

MAK GES 2S 40 oil is recommended for all types of stationary, 2-stroke and spark-ignition engines running on natural gas and requiring ashless type of oil. The engines can be naturally aspirated or turbocharged and medium to high speed. It is also suitable for 2T engines of Copper Bessemer, Ajax, Dresser Rand, Ingersoll etc.

#### Performance/ Benefits:

**Excellent Resistance to Oxidation and Nitration** — outstanding resistance to the effects of oxidising agents and nitration. Resists viscosity increase, filter deposits and formation of acid. Minimises sludge formation, filter choking and piston ring. Ensures reliability, longer drain period and less maintenance.

**Excellent Antiwear Characteristics** – protects heavily loaded and critical engine components, pistons, liners, bearings and gear trains. Enhances engine performance and reliability.

Clean Engine — ashless chemistry controls deposits in combustion chamber, on pistons, ports and spark plugs to maintain maximum efficiency. Highly effective detergency and dispersancy additives control the carbon formation and varnish deposits to reduce oil consumption and maintain engine cleanliness even during extended drain interval.

**Low Oil Consumption** – low engine oil volatility minimises evaporation, extends operating life and reduces top-up oil quantity.

**Extended Drain Interval** — enhances operating life of oil, controls viscosity, reduces sludge and deposits formation through high quality base stock and additive system. Increases engine availability. For optimum results regular inuse oil analysis is strongly recommended.

**Resistance to Rust & Corrosion** – provides excellent protection from rust and corrosion.

## **Performance Level/ Specification:**

• Proprietary Grade

Typical Physico-Chemical Data: MAK GES 2S 40

Characteristics	Method	Value
Appearance	Visual	Clear & Bright
Color	Visual	Brown
SAE Viscosity Grade		40
Density, g/cc @ 15°C	ASTM D1298	0.878
Kinematic Viscosity @40°C, cSt	ASTM D445	120.0
Kinematic Viscosity @100°C, cSt	ASTM D445	14.5
Viscosity Index	ASTM D2270	123
Flash Point, COC, <sup>o</sup> C	ASTM D92	260
Pour Point, <sup>o</sup> C	ASTM D97	-18
Copper Corrosion, 100°C, 3 hrs.	ASTM D130	1a
Total Base Number, mg KOH/ g	ASTM D2896	1.0
Sulphated Ash, %wt	ASTM D874	<0.1

#### Storage & Handling:

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing.

#### **Health & Safety:**

This oil is unlikely to be hazardous when properly used in recommended applications. Contamination of the oil from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.