



Previous Name: Shell Omala Oils

Shell Omala S2 G

Industrial Gear Oils

- EXTRA PROTECTION
- STANDARD APPLICATIONS

Shell Omala S2 G oils are high quality extreme-pressure oils designed primarily for the lubrication of heavy duty industrial gears. Their high load carrying capacity and anti-friction characteristics combine to offer superior performance in gears.

Performance Benefits

- **Long oil life – Maintenance saving**

Shell Omala S2 G oils are formulated to resist thermal and chemical breakdown throughout the maintenance interval. They withstand high thermal loading and resist the formation of sludge to provide extended oil life capability, even with bulk oil temperatures of up to 100°C in certain applications.

- **Excellent wear & corrosion protection**

Excellent load carrying capacity reduces gear tooth and bearing wear on both steel and bronze components.

Shell Omala S2 G has excellent corrosion protection, protecting both steel and bronze components, even in the presence of contamination by water and solids.

- **Maintaining system efficiency**

Shell Omala S2 G oils have excellent water separation properties, such that excess water can be drained easily from lubrication systems to help extend the life of the gears and ensure efficient lubrication of the contact areas.

Water can greatly accelerate surface fatigue of gears and bearings as well as promoting ferrous corrosion on internal surfaces. Water contamination should therefore be avoided or removed as quickly as possible after the occurrence.

Applications

- **Enclosed industrial gear systems**

Shell Omala S2 G oils are formulated using an effective sulphur-phosphorus additive system to provide an extreme pressure performance which allow trouble-free application in most enclosed industrial gearboxes using steel spur and helical gears.

- **Highly loaded gears**

Shell Omala S2 G oils have an effective full extreme pressure (EP) additive system allowing them to be used in highly-loaded gear systems.

- **Other applications**

Shell Omala S2 G oils are suitable for lubrication of bearings and other components in circulating and splash-lubricated systems

For highly-loaded worm drives the Shell Omala “W” series oils are recommended.

For automotive hypoid gears, the appropriate Shell Spirax Oil should be used.

Specifications and Approvals

Meets ISO 12925-1 Type CKD, except ISO 680-1000

Meets DIN 51517- Part 3 (CLP), except ISO 680-1000

Meets AGMA 9005- EO2 (EP)

Meets US Steel 224

Meets David Brown S1.53.101,102,103,104

Meets Cincinatti Machine P34,35,59,63, 74, 76-78



Health and Safety

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from your Shell representative.

Protect the Environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

Advice

Advice on applications not covered in this leaflet may be obtained from your Shell representative.

Typical Physical Characteristics

Shell Omala S2 G			68	100	150
ISO Viscosity Grade		ISO 3448	68	100	150
Kinematic Viscosity		ISO 3104			
at 40°C	mm ² /s		68	100	150
at 100°C	mm ² /s		8.7	11.4	15.0
Viscosity Index		ISO 2909	99	100	100
Flash Point COC	°C	ISO 2592	236	240	240
Pour Point	°C	ISO 3016	-24	-24	-24
Density at 15°C	kg/m ³	ISO 12185	887	891	897

Shell Omala S2 G			220	320	460
ISO Viscosity Grade		ISO 3448	220	320	460
Kinematic Viscosity		ISO 3104			
at 40°C	mm ² /s		220	320	460
at 100°C	mm ² /s		19.4	25.0	30.8
Viscosity Index		ISO 2909	100	100	97
Flash Point COC	°C	ISO 2592	240	255	260
Pour Point	°C	ISO 3016	-18	-15	-12
Density at 15°C	kg/m ³	ISO 12185	899	903	904

Shell Omala S2 G			680	1000
ISO Viscosity Grade		ISO 3448	680	1000
Kinematic Viscosity		ISO 3104		
at 40°C	mm ² /s		680	1000
at 100°C	mm ² /s		38.0	45.4
Viscosity Index		ISO 2909	92	85
Flash Point COC	°C	ISO 2592	272	290
Pour Point	°C	ISO 3016	-9	-6
Density at 15°C	kg/m ³	ISO 12185	912	931

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.