Replaces: Gear Oil SI and Omala SW

Shell **Omala *S3* GP**

Special Application Industrial Gear Oils

- *EXTRA PROTECTION*
- *SPECIAL APPLICATIONS*

Shell Omala S3 GP oils are specialist 'problem solving' lubricants developed to lubricate industrial gearboxes subject to extremely high and heavily shock loaded operations such as those found in steel, cement, mining and quarrying industries. They are formulated for use where ultra-high levels of extreme-pressure performance are required.

Performance Benefits

- *Long oil life – Maintenance saving*

  Shell Omala S3 GP oils are formulated to resist thermal and chemical breakdown throughout the maintenance interval. They help resist the formation of sludge to provide good oil life capability even at temperatures up to 100°C.

- *Excellent wear & corrosion protection*

  Shell Omala S3 GP oils are formulated with high levels of extreme pressure and anti-wear additives properties to help ensure optimal gear and bearing protection even under the severest operating conditions.

  Shell Omala S3 GP has excellent corrosion protection, protecting steel components, even in the presence of contamination by water and solids.

- *Maintaining system efficiency*

  Shell Omala S3 GP oils have excellent water separation properties, such that excess water can be drained easily from lubrication systems to help maintain the integrity of critical oil films and extend the life of the gears.

Applications

- *Highly loaded gears*

  Shell Omala S3 GP oils are designed for use in enclosed industrial gear systems subject to severe operating conditions including high shock loading applications

- *Worn or damaged gears*

  These oils can be used in older gear systems that may be damaged or misaligned. The extreme pressure performance provides additional protection in such applications.

- *Other applications*

  Shell Omala S3 GP oils are suitable for lubrication of bearings and other components in circulating and splash-lubricated systems

For normal load applications the other Shell Omala "G" 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 & 1500
Meets ANSI/AGMA 9005-E02 (EP)
Meets US Steel 224

Meets DIN 51517-3 (CLP), except ISO 680 & 1500
Meets David Brown S1.53.101E, except ISO 680 & 1500
Meets Arcelor Mittal FT163
Omala S3 GP 1500 is included in the Bucyrus Certified Lubricants List

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 authorised 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 S3 GP			220	320	460	680	1500
ISO Viscosity Grade		ISO 3448	220	320	460	680	1500
Kinematic Viscosity		ISO 3104					
at 40°C	mm^2/s		220	320	460	680	1500
at 100°C	mm^2/s		19.9	25.5	31.2	38.5	82.6
Viscosity Index		ISO 2909	104	103	98	93	124
Flash Point COC	°C	ISO 2592	237	239	240	242	224
Pour Point	°C	ISO 3016	-18	-15	-9	-9	-21
Density at 15°C	kg/m^3	ISO 12185	893	897	904	916	902
FZG-Test Failure Load Stage		FZG A16.6/90	>12	>12	>12	>12	>12
Four Ball Weld Load	kg		500	500	500	500	500

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

For more information please contact your Shell Marine Products Representative or refer to the Port Services Guide on our website: www.shell.com/marine. Shell is not liable for application/advice errors when Product Data Sheets/Material Safety Data Sheets are obtained from non-official sources/sites other than the official website as shown above.