



Shell Omala S3 W

High-performance gear lubricants

**SHELL
LUBRICANT SOLUTIONS**



DESCRIPTION

Shell Omala S3 W, formerly Neptune Gear Oil N Series, fluids are fully formulated, high-performance gear lubricants for enclosed industrial gears, including worm gears. They have been developed to provide excellent lubrication, stability and extended service life in demanding industrial applications, with a special emphasis on applications in which potential spills into water will require an environmentally appropriate lubricant.

Shell Omala S3 W lubricants have exceptional load-carrying, antiwear performance over a wide range of temperatures and are rated as “antiwear” (AW) fluids according to ASTM D7043 and FZG testing. With high viscosity index values, Shell Omala S3 W gear lubricants may be used year round, thereby eliminating seasonal changeovers. One viscosity grade of Shell Omala S3 W gear lubricant may replace multiple oils of different viscosity grades.

Shell Omala S3 W lubricants will not hydrolyze in the presence of water. This protects hydraulic systems from decreased equipment life and potential system failure due to the presence of harmful acids.

Shell Omala S3 W lubricants meet United States Environmental Protection Agency's 2013 Vessel General Permit requirements for use in marine applications. When compared to conventional mineral oils they will have reduced environmental impact in the event of a leak or accidental spillage.

Another benefit of Shell Omala S3 W series is that they do not cause a sheen and are in compliance with the US Clean Water Act Sheen Rule.



MATERIAL COMPATIBILITY

Shell Omala S3 W gear lubricants are typically not miscible with petroleum-based oils. The lubricants are compatible with seals and hoses commonly found in gear systems, as well as many common and high-performance elastomers. Contact Shell Lubricant Solutions for more detailed compatibility information relating to paints, plastics and elastomers.

TYPICAL PHYSICAL CHARACTERISTICS

PROPERTIES				
	Test method	Shell Omala S3 W 100	Shell Omala S3 W 150	Shell Omala S3 W 220
ISO viscosity grade	ISO 3448	100	150	220
Kinematic viscosity at 40°C, mm ² /s	ISO 3104/ ASTM D445	103.0	146.0	228.0
Kinematic viscosity at 100°C, mm ² /s	ISO 3104/ ASTM D445	21.6	30.0	45.6
Viscosity index	ISO 2920/ ASTM D2270	238	247	257
Density at 15°C, g/cm ³	ASTM D1298	1.037	1.038	1.041
Flash point (Cleveland open cup), °C	ISO 2592/ ASTM D92	225	225	225
Fire point (Cleveland open cup), °C	ISO 2592/ ASTM D92	265	265	265
Pour point, °C	ASTM D97	-42	-39	-39
FZG scuffing (A/8.3/90), failure load stage	ISO 3016/ ASTM D97	12	12	12

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

CONTACT US

For more information, please contact your Shell Lubricant Solutions representative or visit shell.us/ecosafe.

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