

# VGP compliance declaration – Mobil SHC™ Aware™ Gear Series

Energy lives here

Mobil SHC™ Aware™ Gear Series oils are designated as Environmentally Acceptable Lubricants (EALs) according to the definitions and requirements of the US EPA 2013 Vessel General Permit (VGP).

## EAL definition

An EAL, as defined in Appendix A of the permit, must be “biodegradable,” “minimally toxic” and “not bioaccumulative.” All vessels must use an EAL in all oil-to-sea interfaces, unless technically infeasible.

Independent laboratories have evaluated Mobil SHC™ Aware™ Gear 68, Mobil SHC™ Aware™ Gear 100 and Mobil SHC™ Aware™ Gear 150 gear oils and their components. Using these test results, ExxonMobil has determined that the Mobil SHC Aware Gear Series gear oils meet the VGP definition of EALs.

## Biodegradability/bioaccumulation

The VGP definitions of “biodegradable” include lubricant formulations that contain at least 90 per cent by weight of a constituent substance, or constituent substances, that give a minimum test result of 60 per cent biodegradation within 28 days, according to OECD 301B.

For the 10 per cent of the formulation that does not need to meet the biodegradability requirements, up to 5 per cent may be nonbiodegradable (but not bioaccumulative), while the remainder must be inherently biodegradable.

Acceptable methods to demonstrate nonbioaccumulation include OECD 107 and OECD 117. The requirements for bioaccumulation only apply to nonbiodegradable constituent substances.

In order to comply with the 2013 VGP biodegradability/bioaccumulation requirement, it is necessary to consider the constituent substances. Only substances present in the formulation above 0.10 per cent need to be assessed.

The constituent substances of Mobil SHC Aware Gear Series oils meet these requirements.

## Minimally toxic

The VGP definitions for “minimally toxic” fluids include achieving acute toxicity results of at least 100 mg/L according to OECD 201, 202 and 203 (algae, daphnia and fish).

Mobil SHC Aware Gear Series oils meet these requirements.

## Record keeping

All vessels must keep records on board, including the technical data sheets for all EALs used in oil-to-sea interfaces, in order to prove compliance with the permit.



Steve Walker  
Global Marine Equipment Builder Manager  
ExxonMobil Aviation and Marine Lubricants