



VGP compliance declaration – Mobil SHC™ Aware™ Hydraulic Series

Mobil SHC™ Aware™ Hydraulic Series is a range of oils designated as Environmentally Acceptable Lubricants (EAL) 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 is 'not bioaccumulative'.

All vessels must use an EAL in all oil-to-sea interfaces, unless technically infeasible.

Independent laboratories have evaluated Mobil SHC™ Aware™ Hydraulic 32, Mobil SHC™ Aware™ Hydraulic 46 and Mobil SHC™ Aware™ Hydraulic 68 and their components. Using these test results, ExxonMobil has determined that it meets the VGP definition of an EAL.

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 ten per cent of the formulation that need not meet the biodegradability requirements, up to five per cent may be non-biodegradable (but not bioaccumulative) while the remainder must be inherently biodegradable.

Acceptable methods to demonstrate non-bioaccumulation include OECD 107 and OECD 117. The requirements for bioaccumulation only apply to non-biodegradable 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 be assessed.

The constituent substances of Mobil SHC Aware Hydraulic Series 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 Hydraulic Series meets 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.

Ioannis Chatzakis

Global Field Engineering Manager, ExxonMobil Aviation & Marine Lubricants