

Section 4.5 applies (leave-on PCP)	Section 4.5 doesn't apply (rinse-off PCP)
Sunless tanning products	

Criteria for safer marine lubricants

Manufacturers of marine lubricants subject to the Office of Water Vessel General Permit (VGP) requirements for environmentally acceptable lubricants (EALs), who wish to qualify for the Safer Choice label, must comply with the Safer Choice Standard and Criteria, with the limited exceptions and additional requirements specified below.

It is noteworthy that the chemicals in marine lubricants typically include as part of their functionality the ability to resist degradation and be effective over long periods under adverse conditions. These chemicals also can be complex molecules and mixtures and often lack measured toxicity data. To identify the safest available chemicals given their functional characteristics, the toxicity thresholds in the Safer Choice Master Criteria <https://epa.gov/saferchoice/safer-choice-master-criteria-safer-chemical-ingredients> will be used to evaluate human health endpoints, and the thresholds below will be used for environmental endpoints.

A. Human and environmental health requirements. Candidate products for EAL marine lubricant status must meet, at a minimum, the following ingredient data and hazard limit requirements:

a. For acute mammalian toxicity (section 5.1 of the Master Criteria), neurotoxicity (5.4), repeated dose toxicity (5.5), respiratory sensitization (5.7), and skin sensitization (5.8), the following data requirements apply:

Data requirements: Screen specified R-Phrases, H-Phrases, and Authoritative Lists for each chemical present in a mixture. Chemicals with new data not yet reviewed by authoritative bodies will be subject to review

b. For carcinogenicity (section 5.2 of the Master Criteria), genetic toxicity (5.3), and reproductive and developmental toxicity (5.6), the following data requirements apply:

Data requirements: Screen specified R-Phrases, H-Phrases, and Authoritative Lists. All available data, measured and/or estimated, for the chemical or a suitable analog will be reviewed against the criteria using a weight-of-evidence approach.

c. *Environmental toxicity and fate*

Limitations on persistent, bioaccumulative and toxic chemicals: Acceptable chemicals must not be persistent (half-life >60 days), bioaccumulative (BCF/BAF =1,000), and aquatically toxic* (LC/EC50 <10 mg/L or NOEC/LOEC <1 mg/L).

Limitation on very persistent and very bioaccumulative chemicals: Acceptable chemicals must not be very persistent (half-life >180 days or recalcitrant) and very aquatically toxic* (LC/EC50 <1.0 mg/L or NOEC/LOEC <0.1 mg/L).

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Data requirements: Screen specified R-Phrases, H-Phrases, and Authoritative Lists. All available data, measured and/or estimated, for the chemical or a suitable analog will be reviewed against the criteria using a weight-of-evidence approach.

B. **Direct environmental release.** Ingredients in lubricants that are intended for use in applications that result in their immediate discharge to the environment, bypassing sewage treatment systems, must meet the Criteria for Environmental Toxicity and Fate for Chemicals in Direct Release Products, based on the biodegradation testing in OECD 306.

C. **Renewable content**^[1]. Products must meet the following renewable content requirements:

- a. Hydraulic fluid, transmission fluid, gear oil, and grease: at least 65 percent.
- b. Two-stroke oil: at least 50 percent.

D. **Performance.** Products must demonstrate acceptable performance. For example, pass the ASTM D 665 test - "Standard Test Method for Rust Preventing Characteristics of Inhibited Mineral Oil in the Presence of Water."
