Cargill™

Energy Technologies

Vikolox™ Acid scavengers for lubricants

Create lubricants that last longer with much higher resistance to hydrolysis and oxidation

Vikolox™ acid scavengers

Cargill Vikolox™ acid scavengers offer performance benefits in ester base oils. Vikolox allows the formulator to create lubricants that last longer with much higher resistance to hydrolysis or significantly increased oxidation stability.

Vikolox acid scavengers are especially useful in formulations that will be used at elevated temperatures or where there is a risk of water contamination. Vikolox can also be utilized in ester-based formulations where there is a potential for acid degradation.

Vikolox additives help to neutralize oxidation and hydrolysis reaction products, stopping the increase in acid value and extending oil drain intervals.

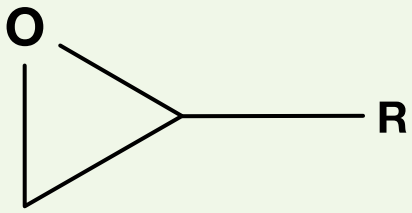
Vikolox can be used in

- Hydraulic oils
- Gear oils
- Compressor oils
- Turbine oils

Vikolox™ 16

Epoxidized olefin

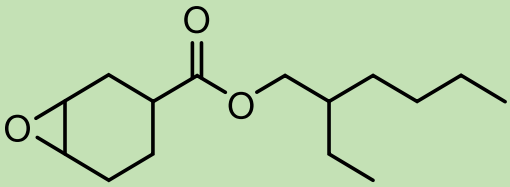
Vikolox 16 is a epoxides of linear chain alpha olefins. These highly reactive molecules act as acid scavengers, functional intermediates and reactive diluents.



Vikolox™ 68

2-Ethylhexyl cyclohexene carboxylate epoxide

Vikolox 68 has an epoxide ring and branched chain structure, offering excellent low temperature properties, making it especially suitable for formulation of aeronautical fluids. This highly reactive molecule acts as an acid scavenger and reactive diluent.



Creating borated epoxides with Vikolox™

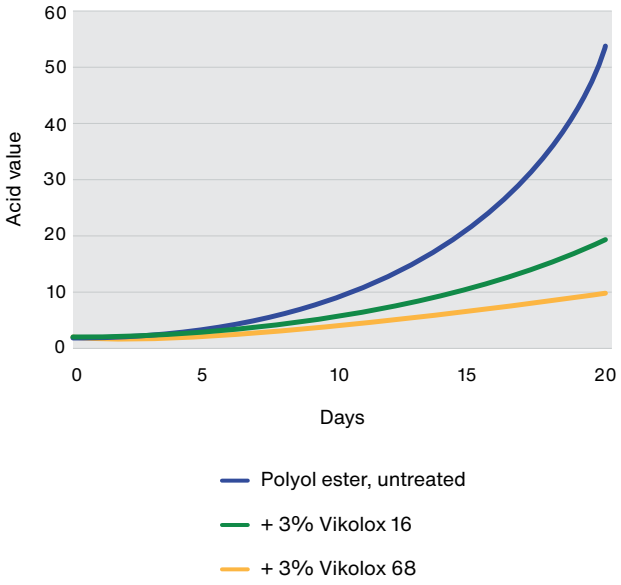
Vikolox products can also be used to create borated epoxides, where Vikolox is reacted with boric acid to create molecules with useful functionality for lubricant formulations including:

- Anti wear additives
- Friction modifiers
- Pour Point depressants

Borated epoxides are particularly effective in reducing wear in heavy duty or multi-purpose lubricants with high levels of dispersants and detergents

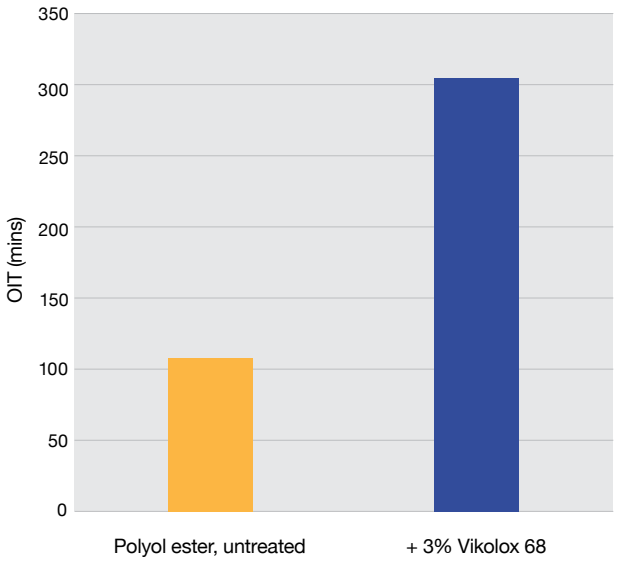
Improving lubricant performance with Vikolox™

Improving hydrolytic stability in polyol ester



In the Swedish standard test of hydrolytic stability (SS 155181:2022), the addition of 3% Vikolox™ reduced the acid value by up to 76% in a polyol ester.

Improving oxidation stability in polyol ester



Testing to ASTM D8206, Vikolox™ increased the oxidation induction time of a polyol ester from 110 to 305 minutes, a 177% improvement.

Vikolox product data

	Vikolox™ 16	Vikolox™ 68
Acid Value (mg KOH/g)	1 max	0.1 max
Oxirane content %	6.2	6.1
Pour Point C	22	-58
Viscosity at 25°C (cP)	6	12
Regional availability	Contact us	Contact us

Further information

Cargill Bioindustrial sales and distribution are coordinated through an extensive worldwide network of technical and commercial experts.

For further information or guidance please contact us:
energy_technologies@cargill.com or scan the QR code below

Find more information **cargill.com/bioindustrial**

Cargill™