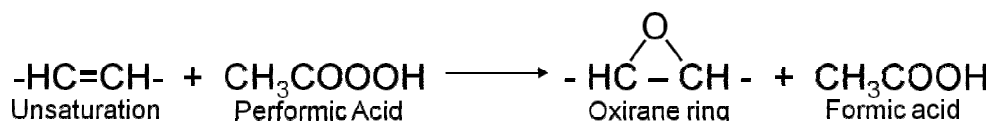


OXIRANE INDEX

Effective Date: 03/15/2021

Oxirane index measures the weight percent of oxirane ring oxygen atoms in a given molecule. It indicates the conversion of the epoxidation process.

The oxirane index is affected by the original raw material selection. It depends on the available double bonds to be epoxidized, as shown on the equation below:



Soy from different regions and varieties present different unsaturation averages, as the distribution of fatty acids of the triglycerides vary. To ensure consistency, a strict specification is determined for the acquisition of soybean oil to ensure the minimum level of unsaturations.

The oxirane index is also dependent on the conversion of the epoxidation process, which is ensured by proper controls, including quality monitoring of all steps of the reaction and separation processes.

The table below shows the oxirane index specifications of Innoleic™ products.

	Oxirane Index (wt%)
Innoleic™ E1	6.00 min
Innoleic™ B5	6.00 min
Innoleic™ MB50	5.00 min
Innoleic™ MB25	5.00 min