About Epicerol®
Epicerol® is an award-winning bio-based epichlorohydrin (ECH) produced by Advanced Biochemical (Thailand) Co., Ltd. (ABT). Based on 100% renewable glycerol, Epicerol® is the most sustainable ECH available commercially in terms of CO₂ emissions and process environmental performance.

As a drop-in for petro-based ECH, Epicerol® allows downstream producers to improve the raw materials impact of their end-products. By incorporating 1 MT of bio-based ECH, manufacturers can reduce a product’s carbon footprint by 2.56 MT CO₂e, compared to traditional ECH.

For a range of industries
Bio-based ECH is a chemical building block and intermediate mainly used for the production of epoxy resins. Epoxy applications include:

- Paints and industrial coatings
- Composite materials
- Electronic components
- Adhesives and sealants

It can also be used for non-epoxy applications:

- Paper chemicals
- Water treatment chemicals
- Surfactants
- Elastomers

Epicerol® is available globally from the ABT production site in Thailand. Get in touch with our local sales teams now for a tailor-made quote.
Sustainability begins at the source
Solvay’s comparative Life Cycle Analysis (LCA) on Epicerol® and propylene-based ECH confirms the environmental benefits.

Advantages include:
- 100% Renewable carbon
- 61% Reduction in Global Warming Potential (GWP)
- 57% Less energy consumption

Process advantages
Epicerol® is more than just bio-based. Brine recycling technology allows for drastically reduced liquid effluents from the production process. Further innovative technology reduces the volume of chlorinated by-products by over 80% compared to conventional production.

Recognised and certified production
Epicerol® has been produced by ABT at its world-class manufacturing site in Map Ta Phut since 2012. In 2015, ABT became the first bio-based chemical operator in Asia to obtain certification from the Roundtable on Sustainable Biomaterials (RSB). RSB is an independent and global multistakeholder coalition whose certification scheme has been recognised as the strongest and most trusted by a number of influential NGOs and UN agencies.