

Ethylidene Norbornene (ENB)





Technology Introduction

IPT has developed the ENB process technology on the basis of deep studies, pilot trials and precise engineering to offer it as captive use along with its EP(D)M technology.

Process

The main steps of IPT ENB technology are:

- DCPD thermal cracking
- Diels-Alder reaction
- Products separations and purification
- VNB isomerization
- Isomerization catalyst preparation

Process Features

- Highly pure ENB product
- Efficient control of thermal cracking
- Maximized selectivity of VNB in Diels-Alder reaction
- High selectivity in isomerization reaction
- Optimized
- Possibility to produce VNB only

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Product Applications

ENB is a bicyclic diene, a transparent colourless liquid used as third monomer in the production of EP(D)M.

ENB accelerates the curing speed of the rubber, increases the resistance to ozone, chemicals, discharging, and water. Therefore such EP(D)M can be used as rubber around the engine, building materials such as waterproof sheet, and modified materials with impact resistance.

Raw Materials

- Dicyclopentadiene (DCPD)
- 1,3-Butadiene (BD)
- Solvent
- Catalysts
- Diathermic Oil

Simple Flow Diagram

