

Olefin/Paraffin separation by facilitated transport using sulfonated polymer containing silver ion

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The separation of olefin and paraffin mixtures is very important in the petrochemical industry. Since traditional cryogenic distillation processes for the separation of olefin and paraffin require highly intensive energy and complicated separation processes. So an alternative processes for olefin and paraffin mixtures separation is required. Recently, the facilitated transport membranes is used to olefin and paraffin mixtures separation. Facilitated transport membranes consisting of AgNO₃ dissolved in sulfonated polymer such as SPEEK and PVIS were prepared for use in olefin and paraffin separation. This separation processes depends on various conditions which are their thickness, containing amount of silver ion, input pressure and existence of water.