

## Siliporite® petrochemicals and refining solutions



CECA has decades of experience in working with various petrochemical companies, major licensors and engineering companies involved in the petrochemical business in the zeolite adsorbents field.

CECA is the second most important producer worldwide in the zeolite adsorbents field and works with the world's largest petrochemical groups.



### Olefinic streams drying

#### Reliable solutions for any kind of technology

Siliporite® molecular sieves are widely used to **dry cracked gas and olefin cuts in their gaseous or liquid phases**. This process is critical, since fluids, after drying, are subjected to low temperature treatment. Any remaining water would cause freezing or the formation of hydrates. The immediate consequence would be an operational shutdown.

CECA's molecular sieves have been designed to provide **reliable and consistent performance, ensuring a continuous and efficient process**.

### Critical issues in cracked gas drying

A feature of the ethylene production industry is the diversity of cracked gas feedstocks and process technology.

Our desiccants are designed for and installed in both high and low pressure crackers. CECA supplies molecular sieves suitable for all kinds of feedstocks. The special 3A products combine high water adsorption capacity with minimum ethylene co-adsorption and excellent mechanical characteristics.

### Refining

Siliporite® molecular sieves have an important function with protecting catalyst in the downstream equipments. These catalysts have highly sensitive to traces of sulfur, mercury, oxygenates and water.

CECA supplies efficient adsorbents packages which combine Siliporite® molecular sieves and activated alumina in order to protect different catalysts in refining and petrochemical units.

### Aromatics separation

CECA has developed special adsorbents, marketed as Siliporite® SPX 5003, for paraxylene separation from mixed C8 aromatics, and can supply the molecular sieves as well as the associated technical services.

Siliporite® SPX molecular sieves, developed by CECA and the Institut Français du Pétrole (IFPEN) for the Eluxyl® process, have opened up new opportunities in the petrochemicals sector, for example in xylenes separation for the production of paraxylene in the liquid phase using Simulated Moving Bed (SMB) technology.

Siliporite® SMX for Eluxyl®-MX is also available for metaxylene separation.

### Linear paraffins C10-C14 from desulfurized kerosene cut

CECA has developed special adsorbents, marketed as Siliporite® NPL 50, for normal paraffin separation from kerosene cuts, and can supply the molecular sieves as well as the associated technical services.

Siliporite® NPL 50 molecular sieves, developed by CECA and the Institut Français du Pétrole (IFPEN) for the Elupar® process, have opened up new opportunities in the petrochemicals sector, for example in paraffin separation for the production of paraffin in the Linear Alkyd Benzene (L.A.B.) process.