

EXCELL-R GREY EPS

Introduction

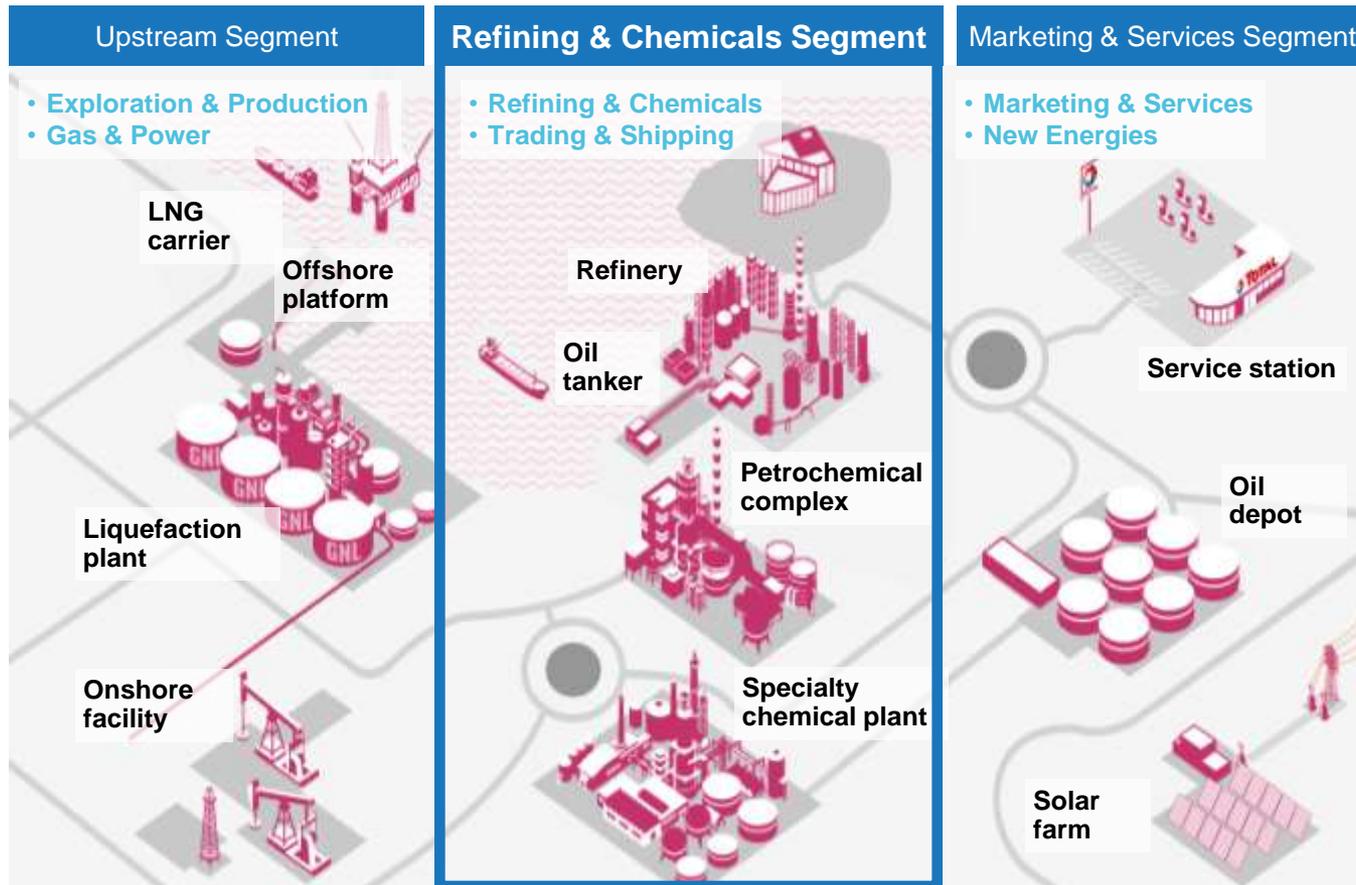


1 INTEGRATED STYRENICS OPERATION

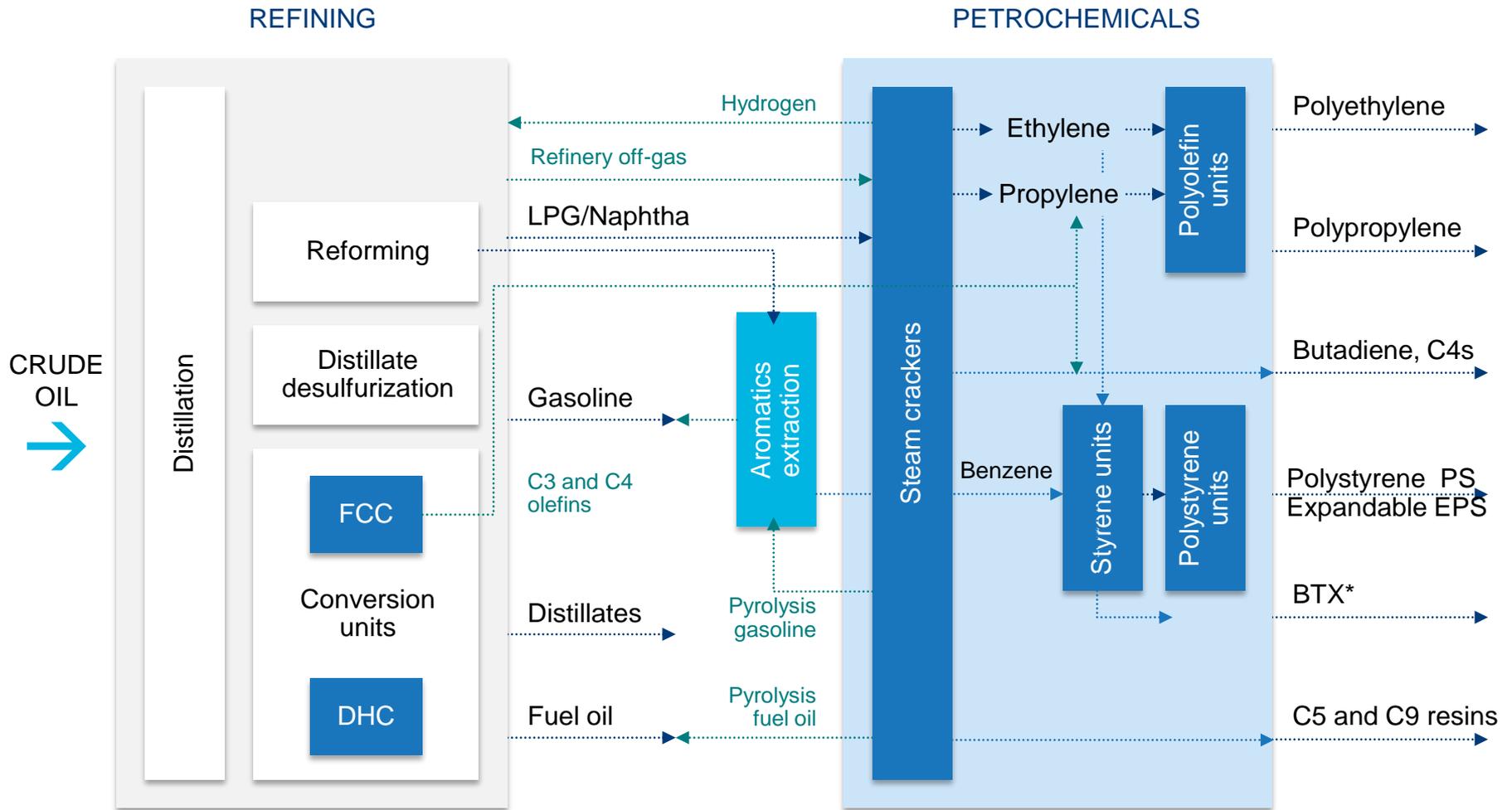


REFINING & CHEMICALS POSITION WITHIN TOTAL

- Refining and petrochemicals, key activities between upstream and marketing.
- Specialty chemicals affiliates that hold leadership positions in their segments.



INTEGRATED REFINING & PETROCHEMICALS OPERATIONS: SYNERGIES



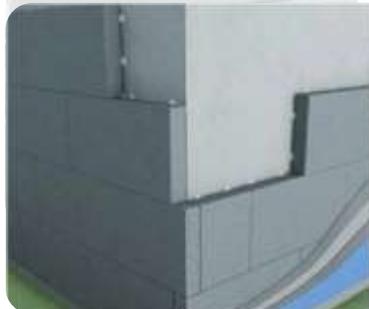
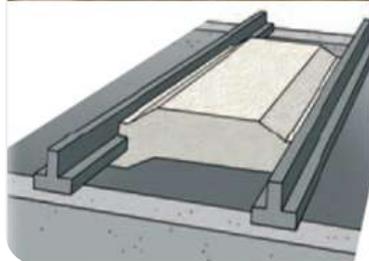
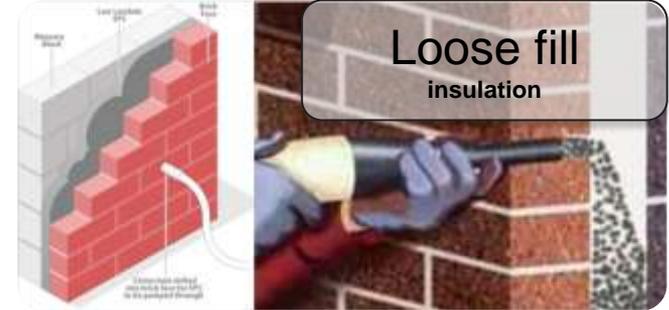
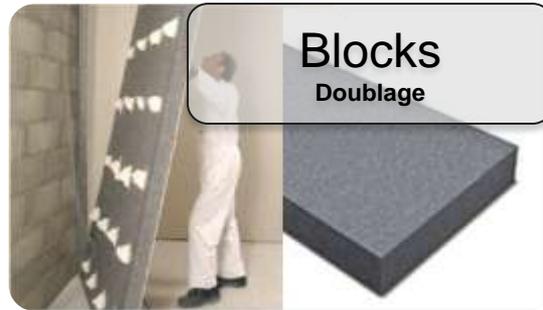
*Benzene-toluene-xylene

2 EPS



GREY EPS APPLICATIONS

Source of innovation for the construction industry



3 EXCELL-R GREY EPS



EPS GRADES WITH AN EXCELLENT R

A NEW RANGE OF ENHANCED EPS DEDICATED TO INSULATION

Applications

Excell-R® can be processed into **foamed insulation boards** & shaped articles, with **improved thermal insulation properties**.



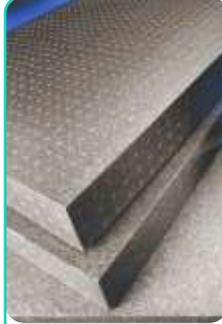
Excell-R[®] Standard
by TOTAL

EPS XLR 5350
EPS XLR 5550

Standard grades are design for applications such as:

- Insulation foamed boards
- Doublage
- Cavity wall filling
- Sandwich Panels
- ...

Packaging :
1100 kg Octabin



Excell-R[®] Self-Extinguishing
by TOTAL

EPS XLR 5359 SE
EPS XLR 5559 SE

SE Grades contain a flame retardant for applications such as:

- Insulation foamed boards
- Outdoor wall insulations (ETICS)
- Cavity wall filling
- Insulated concrete forms (ICF)
- ...

Packaging:
1100 kg Octabin

EPS FOAMS WITH AN EXCELLENT R

TECHNICAL DATA OF EXCELL-R®

Excell-R®: all the strengths of traditional EPS with **improved thermal resistance**

- Typical bead diameter 1.25 mm
Spread 0.9 – 1.6 mm > 90%
- Typical bulk density 625 kg/m³
- Expansion gas pentane
Weight ratio < 5.6% (time of packaging)
- Moisture content < 0.3%
- Flammability class*
DIN 4012; B1*
Euroclass; E*
LNE* comportement




Excell·R®
by 

* For the Self Extinguishing grade

4 TECHNICAL PERFORMANCE



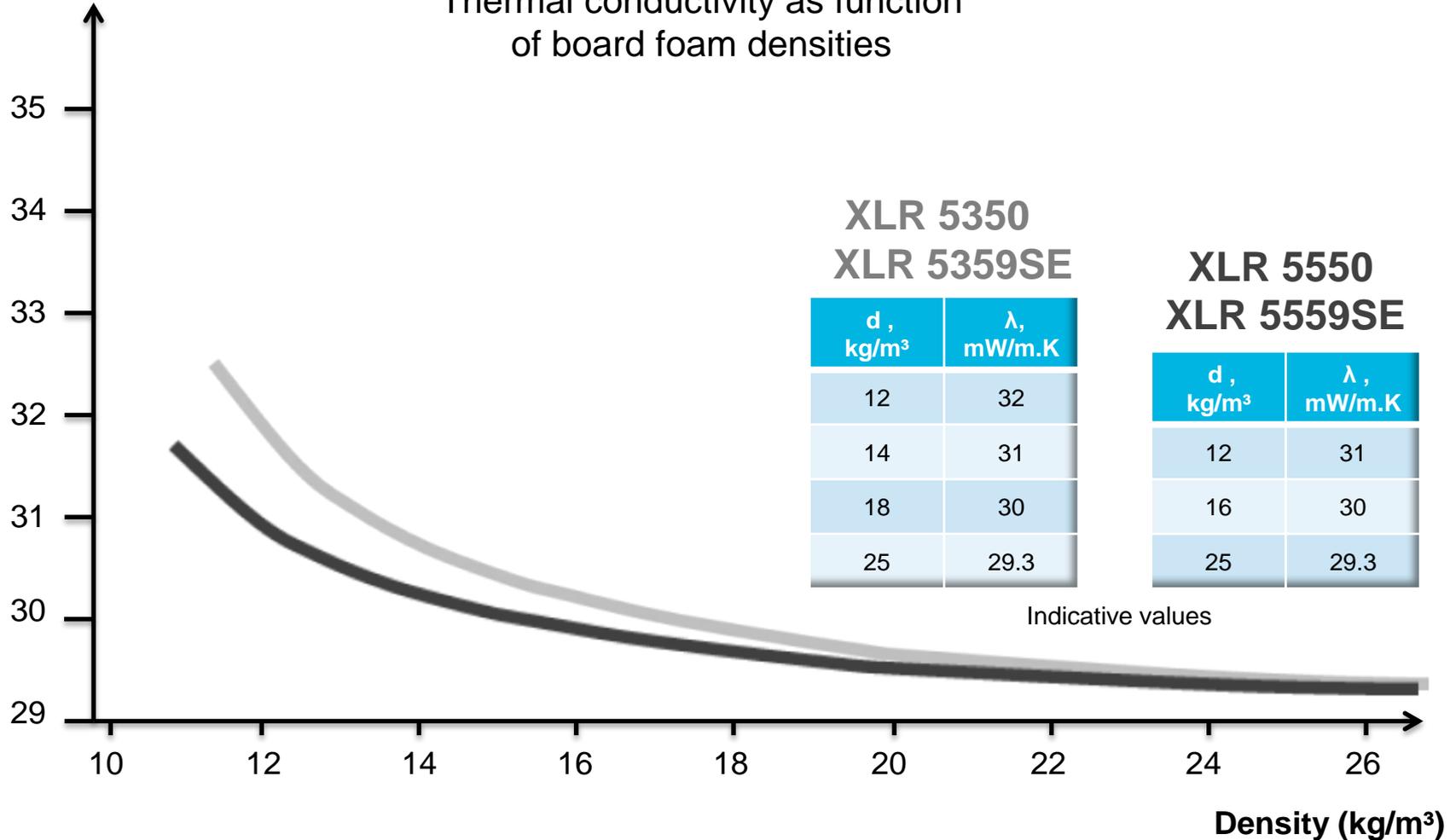
EPS Excell·R

For Building Insulation



Lambda (mW / m.K)

Thermal conductivity as function of board foam densities



EPS **Excell·R**

For Building Insulation



**Compressive Stress
at 10% deformation
(kPa)**

Compressive resistance EN 826
as function of board foam densities

