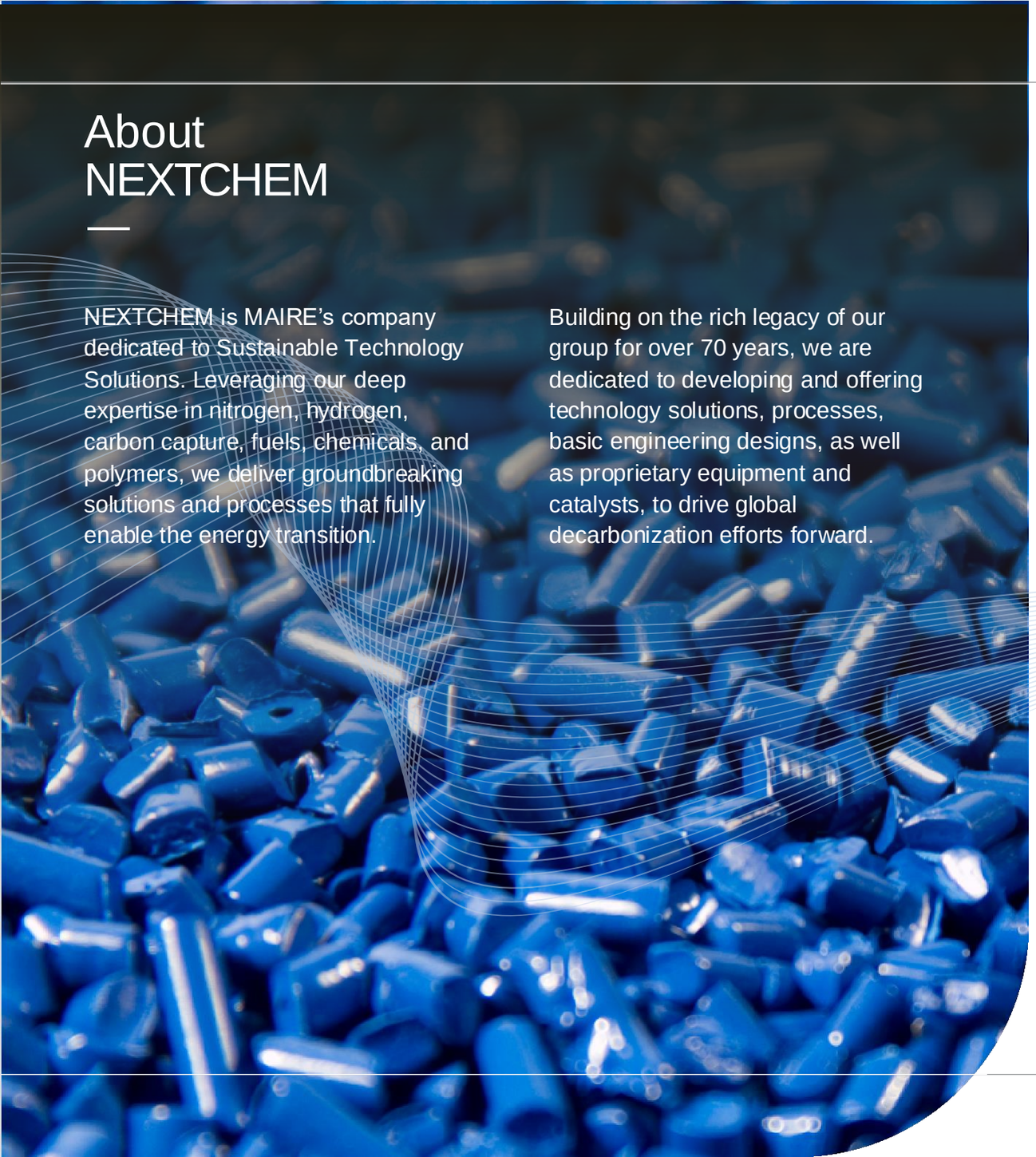
NX CONSER™ Halo-Butyl Rubber

Step up in quality, do not compromise on sustainability

NEXTCHEM
MAIRE Sustainable Technology Solutions



About NEXTCHEM

NEXTCHEM is MAIRE's company dedicated to Sustainable Technology Solutions. Leveraging our deep expertise in nitrogen, hydrogen, carbon capture, fuels, chemicals, and polymers, we deliver groundbreaking solutions and processes that fully enable the energy transition.

Building on the rich legacy of our group for over 70 years, we are dedicated to developing and offering technology solutions, processes, basic engineering designs, as well as proprietary equipment and catalysts, to drive global decarbonization efforts forward.

Driving innovation in the tyre industry

The IIR (Butyl rubber) and HIIR (Halogenated Butyl rubbers) possess high gas and liquids impermeability coupled with excellent mechanical properties preserved in a wide range of temperature. Moreover these rubbers are characterized by a good resistance to fatigue, and an elevated resilience to most chemicals. These properties makes the IIR and HIIR suitable for a wide range of industrial and consumer applications; the major use is in the tyre industry (tyre curing bladders, inner liners, tubeless tyres…).

Butyl rubbers are among the top valuable rubbers, due to the limited number of producers worldwide and the entry barriers for new potential producers. The relevant market is expected to reach a significative expansion with growing demand especially from the tyre and inner tube industry.

Our solution to sustainable butyl rubber synthesis

NX CONSER has long experience in the synthesis of butyl rubber and has developed technologies for IIR/ HIIR and HIIR. NX CONSER technologies reduced consumption of raw materials, chemicals and utilities coupled with lower emission and reduced environmental burden.

NX CONSER experience derived from its 6 licensed plants with two versions of the technology that are offered today - Double Slurry System (DDS) and Polymer Direct Dissolution (PDD).

The PDD technology represents a simplification of the overall process of manufacturing Halo-butyl Rubber. Its several advantages include easier product quality control and thus stable rubber quality, reduced investment cost, simplification of process and operations.

NX CONSER™ Halo-Butyl Rubber

Advanced technologies with environmental and economic benefits

Applications

- Tyre industry
- Adhesives
- Sealants
- Additives
- Protecting Clothing

Your benefits

1. The only independent licensor available in the market
2. Advanced product quality and properties
3. Low utility consumptions and feedstock optimization
4. Safe and reliable design
5. Lower emissions and reduced environmental impact

Technical overview

NX CONSER rubbers are synthesized through the copolymerization of Isobutylene and a minor proportion of Isoprene, conducted in the presence of methyl chloride at low temperatures, around -100°C.

Recycling process of both feedstock and solvent was refined to maximize solvent recovery, while also minimizing utility usage and raw material consumption.

In the finishing stage, the polymer undergoes drying, pressing, baling, and packaging. Rigorous quality checks are performed to ensure that our polymers meet the highest industry standards.