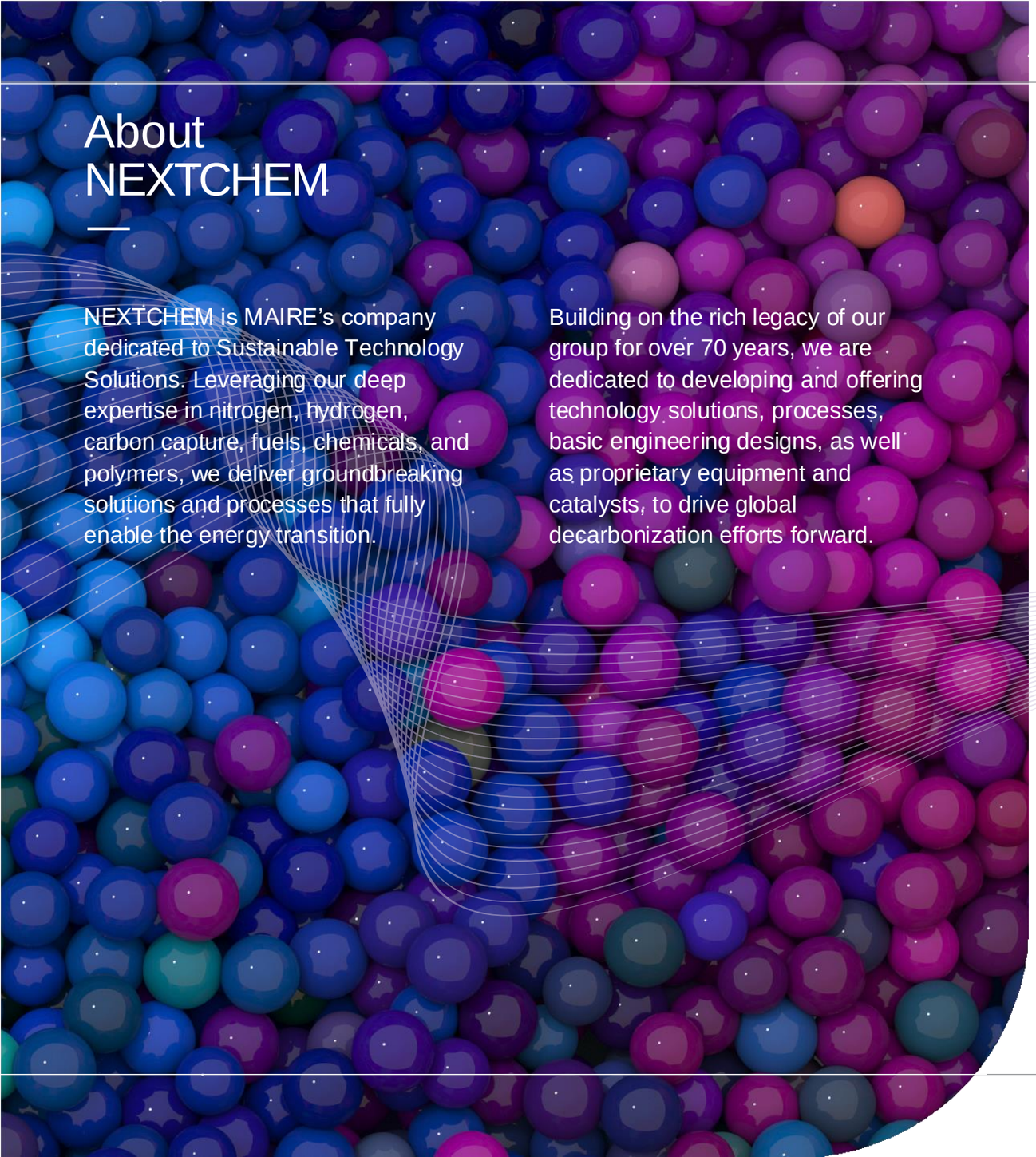
NX CONSER™ C3 Derivatives

Pioneering green technology for high-value molecules

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.

Transforming propylene streams into high-value molecules

NX CONSER is capable to flexibly valorize C3 (Propylene) stream into high added value molecules.

Starting from C3 stream NX CONSER can produce several molecules that have a wide variety of applications.

The advantages of NX CONSER technology, improved and updated by NX CONSER and its industrial or academic partners, are testified from more than 50 years of research and 20 years of commercial production in different sites worldwide.

Our solution to sustainable epichlorohydrin production

The new ECH-EF (epichlorohydrin eco-friendly) patented technology is the most effective green route to produce epichlorohydrin, thanks to its several advantages: lower cost of the raw materials; lower plant investment cost; substantial reduction of energy consumption and of the aqueous and chlorinated by-products.

NX CONSER™ C3 Derivatives

C3 Derivatives technology for cost-effective and eco-friendly results

Applications

ECH-EF

- Widely used as a chemical intermediate (mainly epoxy resins).

MIBK

- Nitrocellulose, Alkyd and Epoxy Resins, Vinyl and Polyurethane Copolimers.
- Solvent for High Solids Coatings, for Varnishes, Adhesives and Inks and for Agrochemicals (Pesticides).
- Surfactants.
- Pharmaceuticals and Mineral Oils Purification.
- Rubber Additive

Your benefits

1. Optimized and adaptable chemical process for maximum MIBK[1] selectivity and acetone recovery
2. Premium product quality with minimal environmental footprint and zero liquid waste
3. Reliable advanced reactor design and precise temperature control for optimal MIBK[1] production
4. Advanced technology with reduced utilities use, cost-effective plant investments, and energy savings with ECH-EF

1 Methyl Isobutyl ketone

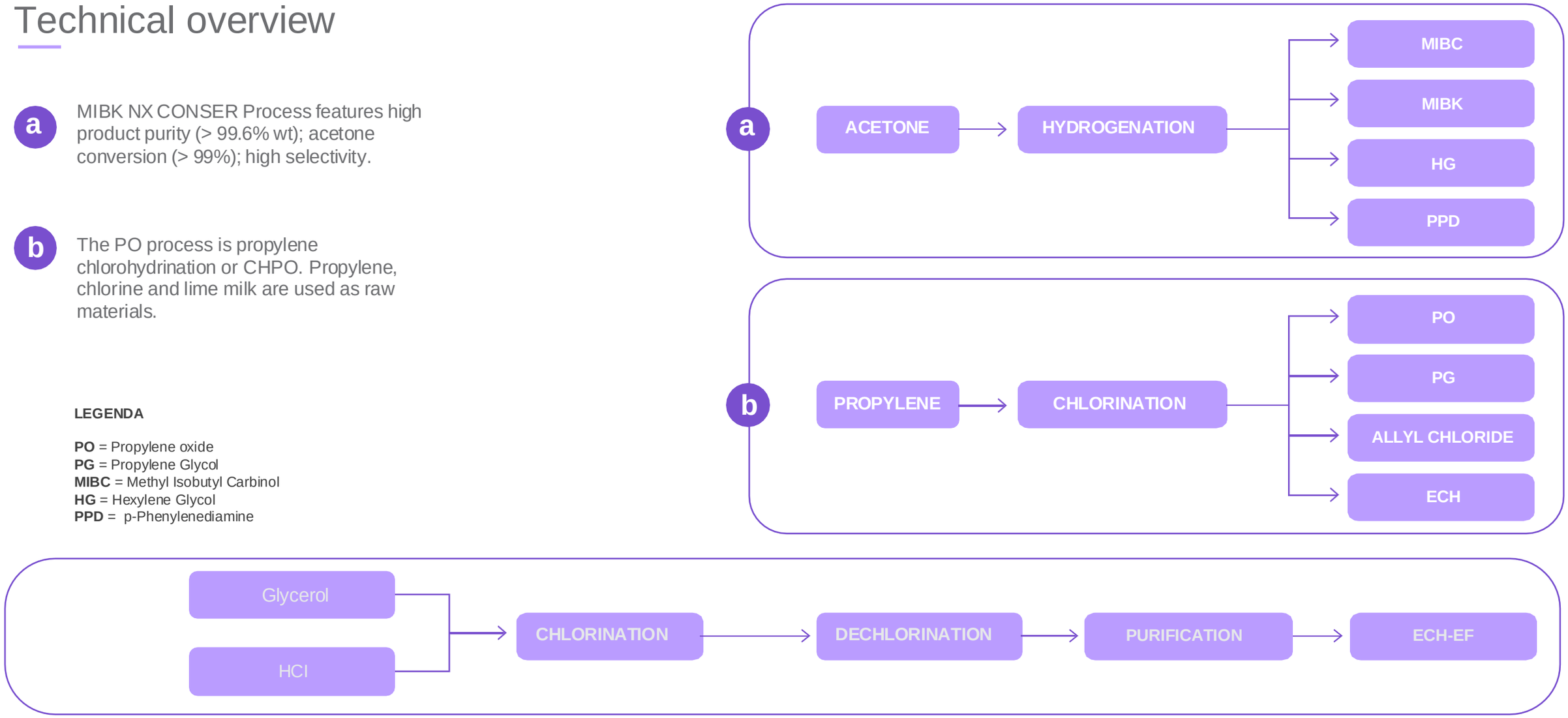
Technical overview

a MIBK NX CONSER Process features high product purity (> 99.6% wt); acetone conversion (> 99%); high selectivity.

b The PO process is propylene chlorohydrination or CHPO. Propylene, chlorine and lime milk are used as raw materials.

LEGENDA

PO = Propylene oxide
PG = Propylene Glycol
MIBC = Methyl Isobutyl Carbinol
HG = Hexylene Glycol
PPD = p-Phenylenediamine



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