

# Lyopan<sup>®</sup>

## Next-Generation ODT Technology

### Taking Tablets Made Easy

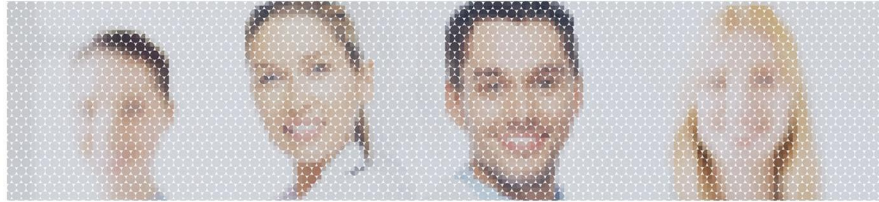
With the major improvements it brings, Lyopan<sup>®</sup> is an innovative kind of technology which significantly extends the market opportunities for orally disintegrating tablets (ODT). The technology is based on a powder formulation which is dosed into a molded blister cavity, wetted with an aqueous liquid, and then freeze-dried. The active ingredient and additional additives can then be dosed in both the liquid and the powder part.

ODT technology offers numerous advantages over conventional tablets:

- It makes taking medication easier for patients with difficulty swallowing (e.g., small children, the elderly, bedridden patients, or psychiatric patients) as the tablet dissolves in the mouth extremely quickly.
- The medication acts quickly as part of the active ingredient is already absorbed in the oral mucosa.

- It's a practical way to take medication without the need for clean drinking water.
- The taste is more pleasant thanks to the option of taste masking.
- The microbial sensitivity is low thanks to the low moisture content in the end product.





## Internal ODT Technology

Compared to other ODT technologies already established on the market, Lyopan® technology offers a number of different advantages:

- An increased range of active ingredients – even non-soluble ingredients – can be administered in powder-form.
- The manufacturing time is reduced considerably. Only about 50% of the formulation is made of an aqueous solution, which reduces the freeze-drying process massively.
- Taste masking is improved as the active ingredients can be dosed in powder-form and not just in the liquid. This increases acceptance among patients.
- The maximum active-ingredient content is higher, therefore enabling smaller tablets.

Lyopan® technology has already been used to formulate different active ingredients successfully, such as:

- Ibuprofen
- Metoclopramide
- Paracetamol
- Loperamide
- Cetirizine
- Caffeine
- Vitamin A
- Vitamin B2
- Vitamin C
- Zinc citrate
- Bromelain

