



Molecular Biology, Made Stable.

Applyo Beads—
Ready-to-Use Reagents,
Stable at Ambient Temperature

applyo-jena.com

The **next generation** of freeze-dried reagent mixtures in bead format that combine **robustness**, **precise portioning** and **rapid reconstitution** for streamlined assay workflows.

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The Challenge

Liquid reagents slow down innovation.

- Require cold-chain shipping and storage, increasing cost and complexity
- Limited shelf life at ambient conditions and above, particularly in hot climates
- Multiple pipetting steps raise the risk of handling errors
- Elevated contamination risk during manual processing. Higher operational waste and complex logistics

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The Breakthrough: Applyo Beads

Freeze dried reagent spheres for single reactions.

- Complete pre-mixed and precisely portioned for consistent assay performance
- Ready-to-use, with reconstitution in seconds for fast setup
- Stable at ambient temperatures and up to 60 °C enabling flexible storage and shipping
- Shelf life up to 3 years supporting long-term projects and stock management



For more technical information
scan code or visit

www.applyo-jena.com/en/technology



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Benefits for Users

The Diagnostic Industry and Biotech

- Access to new markets with challenging logistics and/or hot climates
- No cold chain transport and storage needed reducing total cost of ownership
- Mechanically robust lyophilized beads for industrial assembly and logistics
- Low contamination risks by clean production and simplified workflows
- Customized lyophilization development
- Optional development of any biochemical or molecular assay tailored to your application
- Coaching and guidance on reagent interactions in microfluidic cartridges. Faster time to market by leveraging Applyo's expertise
- Delivery as bulk beads or as pre filled consumables to fit your product strategy

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What You Get

—with Applyo

- Development, validation and production under ISO 13485
- 15+ years of proven expertise in reagent and point-of-care diagnostic development. Proprietary freeze drying technology
- Proven scalable production for diagnostic serial manufacturing
- High batch-to-batch and intra-batch consistency for reproducible results. Upscaling of more than 400.000 beads per batch
- Different bead sizes ranging from 2–8 mm in diameter to match different assay formats and devices
- Specific contamination-free processing (no nucleic acids, DNases, RNases)
- Sterile bead production (free from bacterial contamination)

Contact

Ready to turn your reagent into an Applyo Bead?

We offer tailored solutions for your specific application.

And rest assured—even if your reagents face elevated temperatures again, Applyo Beads will remain ready to perform.

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