



# DECOSPHAERA® BIO 8 TR



## Chemical description and main use

DECOSPHAERA® BIO 8 TR are crosslinked polyurethane spherical microbeads, produced with renewable vegetable sources through a water-based industrial process.

## Main use

DECOSPHAERA® BIO 8TR enhance both performance and aesthetics in coatings and specialty applications. Their unique balance of toughness and elasticity makes them essential for high-performance formulations, offering:

- Matting Properties – Reduce gloss, even at 85°, while maintaining high black jetness.
- Haptic Enhancement – Provide a high slip soft touch.
- Functional Benefits – Improve mechanical strength, abrasion resistance and chemical durability.

## Typical values

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Appearance at 20 °C: White powder

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Dry content: 99 ± 1%

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pH (10% dispersion): 6 - 9

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Oil absorption: 60 - 110 %

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Granulometry D(50): 3 - 8 (µm)

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Bulk density: 300 - 500 (g/l)

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## Product properties

The dosage of DECOSPHAERA® BIO 8 TR in varnish should be adjusted based on the desired effect. They offer broad compatibility, making them suitable for use in water-based, solvent-based and UV/EB coatings; however, it's important to conduct compatibility testing for specific formulations, especially when incorporating them into solvent-based paints. The low oil absorption of DECOSPHAERA® BIO 8 TR allows for high loading levels, enabling the achievement of deep matte finishes without compromising rheology. Furthermore, DECOSPHAERA® BIO 8 TR can significantly enhance surface flexibility. DECOSPHAERA® BIO 8 TR can be incorporated at any stage of processing, as long as adequate stirring is applied to ensure uniform dispersion.

## Sustainability features

DECOSPHAERA® BIO 8 TR is made with raw materials from vegetal sources, obtained from plant-derived substances that, at the best of our knowledge, are not in competition with food production.

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Bio-based carbon content (as a fraction of total organic carbon, according to ASTM D6866)\*: **52%± 2**

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Bio-based content (as a fraction of total polymer weight)\*\*: **approx. 51%**

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\* Bio based carbon content refers to carbon only.

\*\*Bio based content also considers other elements of the product such as oxygen, hydrogen and nitrogen, which may lead to a different value compared to carbon.

## Applications

DECOSPHAERA® BIO 8TR is widely used in various applications, including:

- High-quality paints & specialty coatings – Enhancing performance and visual appeal, particularly in the wood and leather industries, where they achieve deep matte finishes with a natural haptic feel and ensure surface protection.
- Coil coatings (water-based or UV/EB) – Improving flexibility while providing gloss reduction and haptic properties.
- Industrial applications – Serving in anti-vibration and sound-damping solutions.

## Storage and handling

DECOSPHAERA® BIO 8 TR is stable for 12 months from the production date when stored in dry, cool conditions within original sealed boxes. The recommended storage temperature is between 5°C and 35°C.

Please close the inner lining of opened boxes to avoid moisture absorption and contamination.

## Packaging

DECOSPHAERA® BIO 8 TR is available in 20 kg boxes.

## Material safety

Please refer to the product's safety data sheet before use.

## Regulatory information

In case compliance with specific regulations is required please contact our sales representatives.

[polymerbeads.lamberti.com](http://polymerbeads.lamberti.com)

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