



DECOSPHAERA® TRANSPARENT 3 EF

Chemical description

DECOSPHAERA® TRANSPARENT 3 EF are crosslinked polyurethane spherical microbeads, produced through a water-based industrial process.

Main use

DECOSPHAERA® TRANSPARENT 3 EF 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, thermal resistance, abrasion resistance and chemical durability.

Typical values

Aspect: White powder

pH (10%): 5 - 8

Oil absorption: 70 - 120 %

Dry content: 99 ± 1

Bulk density: 300 - 500 g/l

Particle size d(50): 3 - 5 µm

Product properties

The dosage of DECOSPHAERA® TRANSPARENT 3 EF 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® TRANSPARENT 3 EF allows for high loading levels, enabling the achievement of deep matte finishes without compromising rheology.

Furthermore, DECOSPHAERA® TRANSPARENT 3 EF can significantly enhance surface flexibility.

Applications

DECOSPHAERA® TRANSPARENT 3 EF 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 soft 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.

DECOSPHAERA® TRANSPARENT 3 EF is particularly recommended when low thickness coatings are applied, like inks for flexible packaging, coil and foils coating.

Storage and handling

DECOSPHAERA® TRANSPARENT 3 EF 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® TRANSPARENT 3 EF is available in 15 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