



# Spheromers® CA for coatings

## Chemical description

Spheromers® CA are perfectly spherical monosized beads made of cross-linked polymethyl methacrylate (PMMA).

## Main use

The extremely narrow particle size distribution ensures homogeneous and reproducible properties for your coatings. Spheromers® CA are available in 7 different particle sizes and smooth to coarse textured coatings can be designed accurately and reproducibly by choosing the ideal particle size.

## Typical values

Spheromers®	CA6	CA10	CA15	CA20	CA30	CA40	CA60
D90 [µm]:	6	10	15	20	30	40	60
CV [%]:	<5*						
Refractive index:	1.476 - 1.485						
Oil adsorption [ml/g]:	0.212						
Solubility:	inert in most solvents						
Particle density [g/cm <sup>3</sup> ]:	1.2						
Bulk density [g/cm <sup>3</sup> ]:	0.6						

\*CV % = (standard deviation/average bead diameter) x100

## Product properties

The combination of chemical composition and perfectly spherical shape ensure tough beads that contribute to impart burnish resistance, abrasion, polishing and scratch resistance.

Spheromers® CA has a refractive index that matches resin systems for clear coatings and is ideal for formulation of highly transparent varnishes without any milkiness or haze even for dark substrates.

## Applications

Spheromers® CA are suitable for a variety of coatings applications like plastic, film/foil, parquet, wood and metal/coil and can be used in both waterborne, radiation-cured, moisture curable as well as in solvent-based coatings. The choice of suitable bead size for a matting additive largely depends on the dry film thickness of the coating being formulated.

The different Spheromers® CA sizes can be blended and also be combined with other fillers or matting agents to achieve the required opacity, matting and structure.

Recommended addition level is 1 - 12 % depending on bead size and application.

## Storage and handling

Storage stability is at least 5 years from the date of production when stored dry at temperatures below 25 °C in closed containers. Please close the innerliner of open boxes to avoid moisture pick-up and contamination.

## Packaging

Products are available in a 25 kg cardboard box with polyethylene innerliner and 450 kg (18 boxes) on each pallet.

## Material safety

Please consult the Safety Data Sheet

## Regulatory information

Please contact us for details.

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

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## SPHEROMERS® CA 6

### ESACOTE® AC 565

#### MATT FORMULATION 1K

Introduction order	Raw material	Quantity %	Function & Supplier
1	ESACOTE® AC 565	55	Binder (Lamberti)
2	ESACOTE® PU 960	18	Binder (Lamberti)
3	BUTIL CARBITOL	3	Coalescent(DOW)
4	WATER	8	
5	SURFYNOL 104E	0.5	Surfactant(Evonik)
6	BYK 346 (Diluted at 50% water)	0.4	Wetting agent(Byk)
7	WATER	4.45	
8	BYK 333	0.15	Leveler agent(Byk)
9	BYK 024	0.2	Defoamer (Byk)
10	SPHEROMERS® CA 6	10	Matting agent(Lamberti)
11	VISCOLAM® PS 166 (Diluted at 10% water)	0.3	Rheology modifier(Lamberti)
	<b>Total</b>	100	