



ESACOTE® UA 7023

Chemical description

ESACOTE® UA 7023 is a solvent free anionic self-crosslinking aliphatic copolymer dispersion based on polycarbonate polyurethane and acrylic esters.

Main use

ESACOTE® UA 7023 can be used as binder for clear and pigmented coatings providing:

- quick drying,
- good hardness development,
- high gloss and clarity,
- good mechanical, stain and chemical resistance also in 1K application,
- good balance of elasticity and hardness,

Typical values

Appearance at 25 °C:	opalescent liquid
pH:	7.0-9.0
(at 25°C on supplied product, ASTM E 70):	
Viscosity (cPs)	< 300
(Brookfield RVT @ 25 °C, 50 rpm spindle 1)	
Solid content, %:	34.0-36.0

Product properties

Solvent content, % :	0%
Density, @ 25°C g/ml:	1.01 -1.03
Minimal film forming temperature, °C:	~60
Koenig hardness (s)	~140
Film aspect:	hard, transparent and glossy

Please contact our sales representatives for test methods details.

Applications

ESACOTE® UA 7023 is a multipurpose resin that can be used on various substrates and applications. Here below some examples:

- Wood coating, for cabinets and furniture formulations, clear and pigmented.
- On plastic films as antiscratch OPV varnish.
- On aluminium as protective coating 1K.

Starting point formulations are available through our sales representatives.

surfacetreatment.lamberti.com

ESACOTE® UA 7023 can be used as sole binder or in combination with other water-based resins. A preliminary check of compatibility is recommended. We generally suggest small percentage of glycols for good film formation.

Water dispersible polyisocyanates, polyaziridines or carbodiimides crosslinkers can be used to enhance the overall properties.

Storage and handling

Suggested storage condition for ESACOTE® UA 7023 is between +5°C and +35°C. Keep the product away from frost and direct light. If stored under these conditions, ESACOTE® UA 7023 is stable for 12 months after production date.

Packaging

ESACOTE® UA 7023 is available in 120 kg drums or 1,000 kg intermediate bulk containers.

Material safety

Please consult the ESACOTE® UA 7023 safety data sheet before its use.

Regulatory information

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



DECOSPHAERA® DEEP BLACK 30 F

Chemical description

DECOSPHAERA® DEEP BLACK 30 F are crosslinked pigmented polyurethane spherical microbeads, produced through a water-based industrial process.

Main use

DECOSPHAERA® DEEP BLACK 30 F 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°.
- Haptic Enhancement - Creates a rich, matic-like textured sensation.
- Functional Benefits - Improve mechanical strength, abrasion resistance, and chemical durability.

Typical values

Appearance: Black powder

pH (10% dispersion): 5 - 8

Dry content: 99 ± 1%

Oil absorption: 50 - 75%

Bulk density: 500 - 800 g/l

Granulometry d(50): 25 - 35 µm

Product properties

The dosage of DECOSPHAERA® DEEP BLACK 30 F 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® DEEP BLACK 30 F allows for high loading levels, enabling the achievement of deep matte finishes without compromising rheology.

Applications

DECOSPHAERA® DEEP BLACK 30 F are widely used in various applications, including:

- High-quality paints & specialty coatings - Enhancing performance and visual appeal, particularly in the decorative architectural paints where deep matte finishes with a textured feel is needed.

Moreover, the combination of different DECOSPHAERA® colored grades allows the development of sophisticated decorative effects, enhancing both visual and tactile properties. These effects can be further intensified by the contrast with a pigmented base.

DECOSPHAERA® DEEP BLACK 30 F can be incorporated at any stage of processing, as long as adequate stirring is applied to ensure uniform dispersion.

Storage and handling

DECOSPHAERA® DEEP BLACK 30 F 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 30°C.

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

Packaging

DECOSPHAERA® DEEP BLACK 30 F 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



DECOSPHAERA® WHITE 50-250

Chemical description

DECOSPHAERA® WHITE 50-250 are crosslinked pigmented polyurethane spherical microbeads, produced through a water-based industrial process.

Main use

DECOSPHAERA® WHITE 50-250 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°.
- Haptic Enhancement – Creates a rich, materic-like textured sensation.
- Functional Benefits – Improve mechanical strength, abrasion resistance, and chemical durability.

Typical values

Appearance: White powder

pH (10% dispersion): 5 - 8

Dry content: 99 ± 1 %

Oil absorption: 50 - 75 %

Bulk density: 500 - 800 g/l

Granulometry d(50): 46 - 65 µm

Product properties

The dosage of DECOSPHAERA® WHITE 50-250 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® WHITE 50-250 allows for high loading levels, enabling the achievement of deep matte finishes without compromising rheology.

Applications

DECOSPHAERA® WHITE 50-250 are widely used in various applications, including: high-quality paints & specialty coatings – enhancing performance and visual appeal, particularly in the decorative architectural paints where deep matte finishes with a textured feel is needed. Moreover, the combination of different DECOSPHAERA® colored grades allows the development of sophisticated decorative effects, enhancing both visual and tactile properties. These effects can be further intensified by the contrast with a pigmented base.

DECOSPHAERA® WHITE 50-250 can be incorporated at any stage of processing, as long as adequate stirring is applied to ensure uniform dispersion.

Storage and handling

DECOSPHAERA® WHITE 50-250 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 30°C.

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

Packaging

DECOSPHAERA® WHITE 50-250 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.

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ESACOTE® UA 7023 + DECOSP. DEEP BLACK 30F + DECOSP. WHITE 50-250

FORMULA ORIENTATIVA EFECTO ALUMINIO

Introduction order	Raw material	Quantity %	Function & Supplier
1	ESACOTE® UA 7023	83.65	Binder(Lamberti)
2	BUTIL CARBITOL	7.5	Coalescent(Dow)
3	WATER	2	
4	BYK 333	0.3	Leveler agent(Byk)
5	BYK 346	0.2	Wetting agent(Byk)
6	HALLOX FLASH 150	0.3	Anticorrosive(Halox)
7	MONOETILENGLICOL	2	Antifreeze(Alveg)
8	COATOSIL MP 200	0.3	Adhesion promoter (Momentive)
9	TEGO AIREX 902	0.05	Antibubble(Evonik)
10	LIMOCID 135 TR	0.2	Bactericide(Lamberti)
11	VISCOLAM® PS 170 AIR (Diluted at 20% water)	0.2	Rheology modifier(Lamberti)
12	DECOSPHAERA® DEEP BLACK 30F	0.3	Matting Agent (Lamberti)
13	DECOSPHAERA® WHITE 50/250	3	Matting Agent (Lamberti)
Total		100	
14	CROSSLINKER 08 LM	10	Polyisocyanate Crosslinker (Lamberti)
Total		110	