



ESACOTE® PU 960

Chemical description

ESACOTE® PU 960 is an inherently matte, solvent free waterborne anionic dispersion of an aliphatic polyurethane based on polyether diols.

Main use

ESACOTE® PU 960 can be used as a main resin or a co-binder to obtain matt or satin topcoat free of any organic and inorganic matting agents.

ESACOTE® PU 960 gives the following properties:

- matt and a ultra soft touch film
- tack free surface

Typical values

| | |
|--|--------------|
| Appearance at 25 °C: | milky liquid |
| pH: (at 25°C on supplied product, ASTM E 70): | 7.00-9.00 |
| Viscosity (cPs) (Brookfield RVT @ 25 °C, 50 rpm spindle 3) | < 1500 |
| Solid content, %: | 38-40 |
| Gloss unit, 60°: | <2 |

Product properties

| | |
|--|-----------------------------------|
| Solvent content, % : | 0 |
| Density, @ 25°C g/ml: | 1.03 – 1.05 |
| Minimal film forming temperature, °C: | ~0 |
| Film aspect: | matt, ultra soft touch, tack free |

Please contact our sales representatives for test methods details.

Applications

ESACOTE® PU 960 can be used as matt binder or co-binder in many water based system. A preliminary check of compatibility is recommended.

ESACOTE® PU 960 is a multi purpose resin that can be used on various substrates and in several applications. Here below some examples are described:

- Flexible packaging (ex. corona treated BOPP and BOPET) and cardboard for over print varnishes, where a matt and ultra soft touch effect are desired.
- Wood coating, as co-binder for both parquet and furniture top coat with enhances matt, warm and natural look.

surfacetreatment.lamberti.com

Starting point formulations are available through our sales representatives.

No co-solvent is needed for film formation.

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

Storage and handling

Suggested storage condition for ESACOTE® PU 960 is between +10°C and +35°C. Keep the product away from frost and direct light. If stored under these conditions, ESACOTE® PU 960 is stable for 12 months after production date.

Packaging

ESACOTE® PU 960 is available in 120 kg drums or 1,000 kg intermediate bulk containers.

Material safety

Please consult the ESACOTE® PU 960 safety data sheet before its use.

Regulatory information

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

ESACOTE® PU 960

| Introduction order | Raw material | Quantity % | Function & Supplier |
|--------------------|----------------------|------------|-----------------------------------|
| 1 | ESACOTE® PU 960 | 80 | Inherently matt Binder (Lamberti) |
| 2 | BUTIL CARBITOL | 4 | Coalescent(Alveg) |
| 3 | WATER | 11.45 | |
| 4 | BYK 346 | 0.5 | Wetting agent(Byk) |
| 5 | BYK 333 | 0.15 | Leveler agent(Byk) |
| 6 | BYK 024 | 0.2 | Defoamer (Byk) |
| 7 | WATER | 3.35 | |
| 8 | VISCOLAM® PS 170 AIR | 0.35 | Rheology modifier(Lamberti) |
| Total | | 100 | |
| 9 | CROSSLINKER 08 LM | 10 | Polyisocyanate(Lamberti) |
| Total | | 110 | |