Technical - Information

AVCO-PRET FOIL

ADHESIVE FOR COATING GARMENTS WITH METALLIZED FOIL

AVCO-PRET FOIL is a ready made adhesive used for transfer coating of textile garments with metallized polyester foil (alumminum, bronze etc…).

The transfer coating technique is based on a two-step process: Spraying AVCO-PRET FOIL on the fabric syrface according to the desired design. Transfer the metallized foil to the pre-coated area by hot pressing onto the textile fabric via a transfer hot calander or a hot press machine. The metallized foil transfer technique is producing a superior metallic coating effect, compared to direct spraying of aqueous paste containing aluminum or bronze powders. The coated areas produced by the metallized foil transfer process have an outstanding metallic gloss that is highly appreciated by the end-users.

SPECIFICATIONS:

Appearance	White viscous paste.
Chemical nature	Aqueous compound of polymers, adhesive, and thickeners.
Ionic type	Non-ionic/anionic.
Solubility	Can be further dispersed in water.
pH (as it is)	7 - 8
Density (g/cc)	1.0
Viscosity	24 - 28 dPa.s (Haake viscotester)
Compatibility	Is not compatible with electrolytes, cationics, heavy metal ions, acids and strong alkaline products.
Storage	1. Sensitive to frost. After freezing, the product can not be restored and reused. 2. Store in tightly closed drum. Do not store in direct sun. 3. Shelf life is at least 12 months.

PROPERTIES & USES:

1. AVCO-PRET FOIL is suitable for spraying on all types of absorbent textile fabrics. Only fabrics that can stand hot pressing process at 170 - 200°C for 30 - 60 seconds can be used.
2. Foil transfer coating with AVCO-PRET FOIL produces coated garments with good washing fastness at 30°C (delicate wash) and good dry cleaning fastness.
3. Fastness properties depends on the following parameters:

- The quality of the metal foil printed onto the fabric.
- The uniformity and the amount of the product delivered to the fabric.
- The type and the quality of the fabric.
- Drying and calandering / hot pressing conditions.

4. AVCO-PRET FOIL is recommended for all types of woven and knited garments. As the foil sheet is not elastic, it is recommended to check inadvance the suitability of the foil transfer technique to highly elastic garments.
5. AVCO-PRET FOIL can be tinted with aqueous pigment dispersions.
6. AVCO-PRET FOIL is an aqueous compound, and doest not evaporate harmful organic solvents during application and drying.
7. AVCO-PRET FOIL is recommended for coating out-wear, fashion-wear, denim and twill garments.
8. AVCO-PRET FOIL can be used for sticking textile patches to ready made garments.

APPLICATION:

I. Spraying:

1. The quantity and the uniformity of the adhesive delivered to the coated area should be suitable to glue the metal foil and to impart good wash fastness.
2. For lowering the viscosity add up to 10% of water.
3. For improving washing fastness of the coated textile add 0.5-1% AVCO-FIX COAT IWF on the weight of the AVCO-PRET FOIL. After adding the cross linking additive, the pot life of the mixture is app. 8 hours and should be used within this time. Full cross linking effect is achieved in 4 - 5 days. Elevated drying temperatures do not fasten the cross linking process.
4. After spraying the adhesive, the spraying device should be washed and dried in the normal procedure. During long stoppage in the spraying process, the nozzle should be wrapped with a wet rug, or should be removed from the device for cleaning before further usage.
5. When residue of AVCO-PRET FOIL is stored for long time, the product should be kept in tightly closed drum. Before reusing the product should be re-homogenized and filtered.

II. Drying:

Drying should be done at the lowest temperature possible, in order to produce an uncured film of the adhesive on the fabric surface.

Spray or coat and dry completely to evaporate any residual water.

Drying time should not be too long to avoid premature curing of the adhesive.

III. Transfer process:

The transfer of the foil can be done via a transfer hot calander or by hot pressing.

The temperature should be 170 - 200°C, and the contact time should be 30 - 60 seconds.

IV. Releasing the carrier foil:

After cooling the calandered fabric, the polyester foil is removed from the fabric, releasing the metallized layer on the printed area.