

# **AVCO-TAN L316**

THICKENER FOR DISPERSE, REACTIVE, ACID DYES PRINTING

AVCO-TAN L316 is a synthetic thickener developed for the convenience production, handling and use of disperse/reactive or acid dyes printing pastes.

The product has all the advantages of synthetic thickeners with lower sensitivity towards electrolytes.

#### SPECIFICATION:

| Appearance        | Slight brown liquid  |  |
|-------------------|--|--|
| Chemical nature   | Synthetic Acrylate polymer   |  |
| pH (as is)        | 6.0 - 7.0  |  |
| Solubility        | Dispersible in water, in concentration up to 3-5%, forms viscous paste.  |  |
| Compatibility     | <ol> <li>Can be used together with all chemicals and dyestuff normally encountered in printing disperse dyes. Is not compatible with strong alkalis, acids, metallic ions, cationics and concentrated electrolytes.</li> <li>Can be used with hard water together with a suitable complexing agent.</li> </ol> |  |
| Storage stability | Stable for 12 months at least, when stored in a dry place in close container. Do not store in direct sun.  |  |

### PROPERTIES & USES:

- 1. Outstanding coverage and levelness, sharp definition of prints. Excllent results when printing delicate and fine fabrics.
- 2. Increased color yield with good reproducibility.
- 3. Produces smooth paste during short mixing time.
- 4. Printing paste viscosity is stable for long storage time.
- 5. Good wash-off properties.
- 6. Does not react with disperse/reactive/acid dyestuffs.
- 7. Free of formaldehyde and APEO, no smell of kerosene.
- 8. Produces thixotropic printing paste which enables to control flow properties of the paste.
- 9. Does not bleed out of rotary screens during machine stops.
- 10. Does not clog printing screens.
- 11. Very easy to adjust viscosity, no need for prolonged swelling time.

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#### APPLICATION:

1. When preparing the printing paste, all the chemicals should be added to the water and allowed to dissolve prior to adding the AVCO-TAN L316. The thickener should be added while mixing, It will easily disperse and fully hydrate in some minutes.

### 2. Printing paste formulation for disperse dyes

| Water           | 900     |
|-----------------|---------|
| Citric acid     | 5       |
| AVCO-TAN L316   | 40 - 80 |
| Disperse dyes   | Х       |
| Add Water up to | 1000    |

# 3. Printing paste formulation for reactive dyes

| 800      |
|----------|
| 50 – 150 |
| 20 – 25  |
| 10 - 1.7 |
| 40 - 80  |
| X        |
| 1000     |
|          |

# 4. Printing paste formulation for Acid dyes

| Water           | 900     |
|-----------------|---------|
| Citric acid     | 5       |
| AVCO-TAN L316   | 40 - 80 |
| Acid dyes       | Х       |
| Add Water up to | 1000    |

#### 5. Printing paste preparation:

Pre-diluted dyestuffs should be added to the paste while stirring. If needed, in very high dye concentration, viscosity adjustment is done easily by adding thickener during high speed mixing.

#### 6. Fixation

Fixation should be done in the normal procedure required by the type of fixation machine and dyestuffs used.

Fixation of disperse dyes:

- 1) pressurized steam at 0.5-2 atm. for 20-30 min.
- 2) HT steam at 165-180°C for 6-8 min.
- 3) Thermosol at 205-210°C for 60-90 seconds.

Fixation of reactive dyes: Steam at 102 – 105°C for 8 -10 min.

Fixation of acid dyes: Steam at  $100 - 105^{\circ}$ C for 20 -30 min.

# 7. Washing off

Washing off should be done with soft water, or with tap water with the addition of complexing agents. Temperature, type of washing aids and procedures depends on machinery and type of dyestuffs. (For more details refer to the technical bulletins of AVCO-LPET or AVCO-L100).

**8.** To improve penetration into the fabric add 3-6 g/kg AVCO-TEX MP.

The information given in this bulletin is, to the best of our knowledge accurate. It is intended to be helpful is not to be considered a guarantee.

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