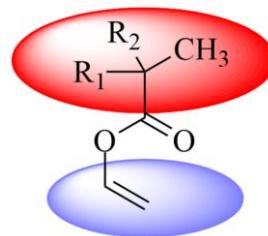


Vinyl neodecanoate-W10

Introduction:

Neodecanoic acid vinyl ester (W10) is a saturated monobasic fatty acid vinyl ester with highly branched chain on α - carbon. The structural formula is shown in the figure below:



Both R_1 and R_2 are alkyl with total 7 carbon atoms. The tertiary carbon structure has large steric hindrance, which is similar to umbrella structure. Therefore, it has good hydrophobicity, acid and alkali resistance, and UV resistance. Vinyl is easy to copolymerized with acrylics, vinyl acetate and other monomers for binary, ternary and multicomponent to form a copolymer tertiary carbon emulsion.

Applications:

Vinyl tert-carbonate is easy to copolymerize with other monomers (vinyl acetate, acrylate, ethylene and vinyl fluoride), and gives the copolymer excellent properties. The highly branched aliphatic structure has a strong "umbrella" effect on the self monomer and adjacent monomer in the copolymer, which makes the copolymer have excellent anti hydrolysis and anti-oxidation properties Alkali resistance and excellent UV resistance, due to its highly branched side chain, the copolymer has good flexibility, wettability and excellent leveling property, and its volatility is low. It is suitable for the preparation of low VOC copolymer emulsion and environmental friendly polymer.

Typical applications include:

- Industrial coatings
- Interior and exterior wall decoration coating
- Waterproof system
- Wood glue
- Pressure sensitive adhesive
- Building adhesives



- Dispersible powder and emulsion for cement mortar
- Textile and non-woven adhesives

Specifications:

| Property | Test method | Unit | Value |
|---------------------|-------------|---------|---|
| Colour | GB 3143 | Pt-Co | ≤ 35 |
| Water content | GB/T 606 | % m/m | ≤ 0.1 |
| Acid value | -- | mgKOH/g | ≤ 5.0 |
| Olefin unsaturation | -- | mol/kg | 4.85-5.10 |
| Appearance | Visual | -- | Clear liquid , free from suspended matter |

Typical Properties:

| Property | Test method | Unit | Value |
|---------------------------------|-------------|--------------------|--|
| Molecular formula (theoretical) | -- | -- | C ₁₂ H ₂₂ O ₂ |
| Molecular weight (theoretical) | -- | -- | 198 |
| Polymerization inhibitor | | mg/kg | 5±2 |
| Kinematic viscosity 20°C | ASTM D445 | mm ² /s | 2.2 |
| Specific heat 20°C | | kJ/kg °C | 1.97 |
| Latent heat of evaporation 20°C | | kJ /mol | 48.9 |
| Boiling point range * | ASTM D1160 | °C | 133-136 |
| Flash point (PMCC) | ASTM D93 | °C | 75 |
| Freezing point | ASTM D97 | °C | >-60 |
| Miscibility with vinyl acetate | -- | -- | Completely miscible |
| Heat of polymerization | | kJ/mol | 96 |

Transport and Storage:

The product is packed with 200 liter drums. ISO-tanks are used when the product is transported in bulk. Please use Neodecanoic acid vinyl ester-W10 strictly according to our MSDS. For more information, contact the Operations Department of our company.

The information contained in this publication is, to the best of our knowledge, true and accurate, but any recommendations or suggestions which may be made are without guarantee, since the conditions of use are beyond our control.