

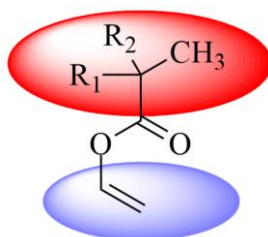
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Vinyl neodecanoate-W10

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.

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