

Product Data Sheet

Ester Alcohol C12 (Texanol) - Coalescing Agent

Description

Description	Ester Alcohol C12 – commercially also known as Texanol, chemically 2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate (TMPD-MIB) – is a high-performance coalescing agent for water-based coating systems. It reduces the Minimum Film Formation Temperature (MFFT) of latex/emulsion binders, allowing polymer particles to fuse into a continuous, durable film at ambient application temperatures. Its high boiling point and low volatility make it a preferred coalescent in low-VOC waterborne formulations.
Applications	Architectural interior and exterior paints (waterborne/latex) Industrial and protective waterborne coatings Adhesives, printing inks and emulsion-based formulations Low-VOC / eco-friendly coating systems
Grade	Coalescing Agent Grade, Min. 98% Purity
CAS No.	25265-77-4

Key Benefits

1. Reduces Minimum Film Formation Temperature (MFFT), enabling good film formation at lower ambient temperatures
2. Improves gloss development, film integrity, scrub resistance and overall coating durability
3. High boiling point and low volatility supports low-VOC formulation requirements
4. Excellent compatibility with acrylic, styrene-acrylic and vinyl-acrylic emulsions/latex binders
5. Low odour profile compared to conventional glycol-ether coalescents

Chemical Analysis & Physical Data

Typical Specification

Parameter	Unit	Specification
Assay (Ester Alcohol Content)	wt%	Min. 98.0
Appearance	–	Colourless to pale yellow clear liquid
Colour (APHA/Pt-Co)	–	Max. 25
Density @ 20°C	g/cm ³	0.945 – 0.955
Boiling Point	°C	≈ 254
Flash Point (Closed Cup)	°C	≈ 113 – 120
Viscosity @ 25°C	mPa·s (cP)	15 – 20
Water Solubility @ 25°C	wt%	< 0.2 (practically insoluble)
Acid Value	mg KOH/g	Max. 2.0
Moisture	wt%	Max. 0.2

Packaging

Packaging 200 kg (Net) HDPE/Steel Drums
 20 kg / 25 kg HDPE Drums
 1,000 kg IBC Totes
 Custom packaging available on request.

Storage & Handling

1. Store in a cool, dry, well-ventilated area away from direct sunlight and ignition sources
2. Keep containers tightly closed when not in use to prevent moisture ingress and minimise odour release

3. Combustible liquid (flash point $\approx 113-120^{\circ}\text{C}$) – keep away from open flame, sparks and hot surfaces
4. Keep away from strong oxidising agents
5. Avoid prolonged storage in extreme heat conditions

Quality Assurance

1. Every batch is tested against the specification above before dispatch
2. A batch-specific Certificate of Analysis (COA) accompanies each shipment, reporting assay, colour, density and acid value against this TDS
3. COA available on request prior to shipment for buyer pre-approval
4. Third-party inspection (SGS/Intertek) can be arranged on request for regulated-market shipments

Disclaimer: The information provided in this document is based on our current knowledge and is intended as a general guide. Ochnology Solution Pvt. Ltd. reserves the right to modify specifications without prior notice. Buyers are advised to conduct their own testing for specific applications. A batch-specific Certificate of Analysis (COA) is available on request for each shipment.