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Exolit® 855

Phosphoric acid ester

Product Description

Exolit 855 is a proprietary mixture containing liquid partial phosphoric acid esters for intumescent transparent fire protection applications for wood. The clear liquid is fully soluble in water, non-hygroscopic and non-flammable.

Benefits

- Key ingredient for the transparent intumescent coating on various kinds of wood
- Contains, in the combination with melamine-formaldehyde resins all necessary reaction partners for an intumescent reaction
- Exolit 855 is an aqueous solution and can hence not be used in solvent-based formulations.
- Reacts at lower temperatures than conventional systems
- Allows the combination of excellent fire-resistance and durability in high humid indoor areas with brilliant wood surfaces
- Its unique transparency and clarity allows the formulation of clear varnishes on various wooden surfaces like MDF, chipboards, plywood and veneered wood

Specifications

Characteristics	Unit	Target value	DS ¹⁾	TD ²⁾	Test method
Gardner color		max. 0,8	☑		ISO 4630
Appearance		Clear liquid			Visual
Phosphorus	% (w/w)	16 - 18	☐	☑	Photometry after oxidizing dissolution
Water / Moisture	% (w/w)	12 - 17	☑	☐	Karl-Fischer-Titration; (DIN 51,777)
Density	g/cm ³	ca. 1.5	☐	☑	at 25 °C Flexural resonator (DIN 51,757)
pH Value		1,3 - 2,3	☑	☐	Potentiometry
Solubility in Water	% (w/w)	completely	☐	☑	
Acid Number	mg KOH/g	400 - 600	☑	☐	Titration using alkali at pH 9
Weight Loss			☐	☑	
		300 °C			approx. 35
		450 °C			approx. 40
		600 °C			approx. 70

¹⁾ Delivery specification: The product is monitored on a regular basis to ensure that it adheres to the specified values. Test methods: Clariant method numbers in brackets.

²⁾ Technical data: The technical data are used solely to describe the product and are not subject to regular monitoring.

Packaging and Handling

Delivery form

Colourless to pale yellow liquid.

Packaging

Exolit 855 is delivered in 13 kg canister, 220-Liter-drums or 1.000-kg-IBC's.

Storage

The product should be stored in a dry place at room temperature. Minimum shelf life is 6 months from the date of shipping when stored according to the said conditions.

Safety

For regulatory details such as the classification and labelling as dangerous substances or goods please refer to our corresponding Material Safety Data Sheet.

Kontaktieren Sie uns bitte, wenn Sie Fragen zu Sicherheit oder Auflagen haben bzw. zum Datenblatt zur Material Sicherheit (Material Safety Data Sheet, MSDS).

Contact Us:

Please contact us for safety and regulatory details or the Material Safety Data Sheet (MSDS).

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