

BIO - RD

Technical Data Sheet

Mark of conformity: P -BWU03-I-16.5.206

Test centre: Forschungs- und Materialprüfungsanstalt für das Bauwesen (FM PA¹) Stuttgart dated 3 March 2003

Flame retardant finish for cellulose fibre textiles for interior use as per DIN 4102, building material class B 1.

Product description:	BIO RD is a clear, colourless flame-retardant finish based on water-soluble, non-halogen ammonium-phosphorus-sulphur compounds with high skin tolerance (pharmatox report).
Scope:	Absorbent materials made from natural fibres including paper, cardboard, thin plywood, woven goods and knitwear made from cellulose fibres, their blends (including wool parts), artificial raffia and non-woven fabrics. Areas of application include decorative items made from natural fibres, particularly cellulose-based; furnishing fabrics, including velvet and plush; paper, cardboard, plywood and absorbent rush mats made from cellulose fibres for trade shows, exhibition halls, theatre stages, public houses and restaurants and assembly rooms.
Properties:	Meets the requirements of the fire shaft test in accordance with DIN 4102, class B 1. Not subject to corrosion even in the case of base metals. Does not crystallise on the treated items under normal climatic conditions. Has good penetrating characteristics. Has virtually no adverse affect on the product appearance and does not change the colour tone. The finish is not water-proof or washable.
Skin compatibility:	Textiles treated with BIO RD are classified as skin-compatible. A pharmatox report can be provided on request.
Active ingredients:	Ammonium-phosphorus-sulphur compound, non-halogen
Ordinance on Hazardous Substances:	No labelling required.
pH value:	Approx. 6.5 –7.5
Storage:	The active ingredient in this product is not sensitive to frost.
Active ingredient guarantee:	At least 3 years
Application rate:	0.2 - 0.5 l / m² The dry coat required to comply with DIN 4102 in accordance with the test certificate is 165 g / kg cellulose.
Processing instructions:	The following recommendations are made depending on the type and finish of the decorative item: Fully finished fabrics which have been stitched or decorated: immersion, spraying with subsequent drip drying and drying at room temperature. Fabric by the roll: use the Foulard procedure (request application sheet) or immersion impregnation, spinning off the product to 60 –70 % residual moisture. For cardboard and paper: immersion, painting or spraying. The tear strength of the paper must be taken into account when selecting the application method. In the case of poorly wettable fabrics, a wetting agent can be added. In special situations we recommend performing a patch test first.
Drying temperature:	Room temperature, or between 100 — max. 130° C. Care must be taken with light materials. Note: decorative items with flame retardant finishes can lose their flame retardant properties after prolonged use due to the accumulation of dust, grease and nicotine.

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They may be retreated with BIORETARD occasionally, having been washed first.