

Construction

Technical Data Sheet

Styrofan[®] 4104



Chemical Nature **Aqueous styrene-butadiene copolymer dispersion for use in concrete floor primers and for the modification of cementitious mixtures.**

Properties

Typical Properties

Solids content	%	ca. 47
pH		ca. 7.0
Viscosity at 23 °C (Brookfield RV, Spindle #2, at 20rpm)	cps	< 200

Other properties of the dispersion

Density at 23 °C	lb/gal.	ca. 8.5
Freeze/thaw stability		not resistant

Properties of the film

Appearance		Transparent
Surface		not tacky
Tensile Strength	psi	1600
Elongation at break	%	500
Glass transition temperature T _g (DSC)	°C	ca. 10
Water Absorption (after 24hr immersion in water)	%	ca. 3

Applications

Features

Styrofan[®] 4104 may be used in penetrating primer coats over “green” concrete slabs (e.g., flooring) to help control moisture vapor transmission from the underlying cementitious substrate. Styrofan[®] 4104 has good calcium ion stability, is cement stable, and thus, may also be used within the mortar mix itself to improve properties. In ASTM C1439 mortar at 0.15 p/c, Styrofan[®] 4104 imparted superior compressive strength, rapid strength development, and low mortar cube water absorption. Styrofan[®] 4104 is ammonia and APEO free.

Processing

Customers must conduct their own trials when developing and processing products based on Styrofan[®] 4104. The compatibility and miscibility with other emulsions or latex polymers and other formulating materials are affected by a variety of factors which are too numerous for BASF to take into account in our own trials. This includes the viscosity stability of the formulated product in storage.

Safety

General

The usual safety precautions when handling chemicals must be observed. These include the measures described in Federal, State and Local health and safety regulations, thorough ventilation of the workplace, good skin care and wearing of protective goggles.

Safety Data Sheet

All safety information is provided in the Safety Data Sheet.

Storage

Styrofan® 4104 has a shelf life of six months from delivery date, provided it is stored in accordance with the "Handling and Storage of polymer dispersions" brochure. Technical information regarding the storage of BASF polymer dispersion products is available upon request.

Important

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