

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	%	46.0 – 48.0
pH		6.0 – 8.0
Viscosity at 23 °C (Brookfield RV, Spindle #2, at 20rpm)	cps	20 - 400

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

* The above values should not be taken as specification

Application

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 for Styrofan 4104.

Storage

Please refer to the "Handling and Storage of Polymer Dispersions" brochure.

Important

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