

Styrofan® 1186

Chemical Nature

Aqueous styrene-butadiene copolymer dispersion for use in concrete modification.

Properties

Typical Properties

Solids content	%	ca. 48
pH		ca. 10
Viscosity at 23 °C (Brookfield RVT, Spindle #1, at 20 rpm)	mPa s	ca. 38

Other properties of the dispersion

Specific Gravity	lbs/gal	ca. 8.5
	g/cm ³	ca. 1.01
Bound Styrene	%	ca. 66
Dispersion type		anionic
Coagulum (100 mesh)	Wt. %	< 0.1
Sensitivity to frost	cycles	ca. 2

Properties of the film

Appearance	slight yellow, transparent
Surface	tack-free

* The above values should not be taken as specification

Application

Fields of application

Styrofan 1186 is used mainly for modifying concrete mixtures. The most notable applications are concrete for bridge deck and parking garage overlays. The addition of Styrofan 1186 to conventional unmodified concrete mixtures reduces the amount of water required for the placement of the mix. The lower water typically results in a cured concrete with higher compressive strength. The polymer forms an elastic membrane throughout the matrix of the cured concrete, reducing the formation of voids and hairline cracks therein. Moreover, the resulting concrete mixture shows improved resistance to the penetration of oil, salts and aids in the adhesion of the new concrete to old. Flexural strength and abrasion resistance are also increased.

Styrofan 1186 has been pre-qualified by the FHWA under FHWA RD-78-35

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 1186.

Important

The descriptions, designs, and data contained herein are presented for your guidance only. Because there are many factors under your control which may affect processing or application/use

it is necessary for you to make appropriate tests to determine whether the product is suitable for your particular purpose prior to use. **NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, OR DATA MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, DATA OR DESIGNS PROVIDED BE PRESUMED TO BE A PART OF OUR TERMS AND CONDITIONS OF SALE.** Further, you expressly understand and agree that the descriptions, designs, and data furnished by BASF hereunder are given gratis and BASF assumes no obligation or liability for same or results obtained from use thereof, all such being given to you and accepted by you at your risk.

Styrofan is a registered trademark of BASF Group.

© BASF Corporation, 2024



BASF Corporation is fully committed to the Responsible Care® initiative in the USA, Canada, and Mexico.

For more information on Responsible Care® go to:

U.S.: www.basf.us/responsiblecare_usa

Canada: www.basf.us/responsiblecare_canada

México: www.basf.us/responsiblecare_mexico

BASF Corporation
Dispersions and Resins
11501 Steele Creek Road
Charlotte, North Carolina 28273
Phone: (800) 251 – 0612
Email: CustCare-Charlotte@basf.com
Email: edtech-info@basf.com
www.basf.us/formulation-additives