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BASF SE

# Styrofan ID<sup>®</sup> 604 ap

Aqueous polymer dispersion used in the modification of hydraulic setting systems.

**Chemical nature** Aqueous, modified Styrene Butadiene copolymer dispersion.

## Properties

<b>Product specification</b>	Colour & appearance	: White viscous liquid
	Solids content ( 140°C / 30 minutes)	: 39 -41 %
	Viscosity at 30°C ( Brookfield RVTDV – ,Spindle 3 / 100 RPM )	: 25 - 65 mPaS
	pH	: 7.5 – 9.5

<b>Other properties of the dispersion</b>	Density	: 1.02 g/cm 3
	Dispersion type	: Anionic
	Plasticizer content	: None
	Thinnability with water	: Freely miscible
	Resistance to frost	: Not resistant
	Minimum film forming temperature	: 16°C

**General** Styrofan® ID 604 ap is compatible with most other dispersion in our range.

Styrofan® ID 604 ap is also compatible with commercial cellulose's , however it is to be noted that some thickeners commonly used in cement mixture have stiffening effect and disturb the setting process and also impair the wet strength of the hardened mixture .

Styrofan® ID 604 ap is also compatible with Plasticizers , such as Plastilit® 3060 , Palatinol® and Palamoll® grade.

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**Applications**

Styrofan® ID 604 ap is used for modifying hydraulic setting agents, particularly cement mixtures. It is preferably used in cases where maximum demands are made on the mechanical properties of these products ( e.g., touching up mortar and floor screed). As the efficiency of Styrofan® ID 604 ap can be influenced by different types of hydraulic setting agents, preliminary tests must always be carried out for the intended application.

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**Processing**

Addition of 10 – 20 % by weight of dispersion, in terms of cement, produce the desired effect. As Styrofan® ID 604 ap has a high film forming temperature, it should only be applied in combination with cement as bridge for the adhesion. Depending on the intended application, it may be advisable to add film forming auxiliary in amounts of 2 – 5 % by weight to the wet component. Styrofan® ID 604 ap like most dispersions, has tendency to foam and hence anti-foam agents in amount of 1 % by weight to the dispersion should be added. Preliminary trials should be carried out to test the suitability of the additives used along with it. Manufacturers should carry out their own trials in developing products based on Styrofan® ID 604 ap, because experiments on our part cannot embrace the great variety of factors that may exert an influence during production, processing. E.g., the mutual compatibility of the components of the formulation, the curing characteristics of the hydraulic binders, the wetting and adhesion on various substrates etc., These tests should include storage trials at 50 0 C to determine whether viscosity remains stable.

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**Safety**

Attention should be paid to the normal precautions for handling chemicals and to the measures prescribed in the local health regulations. The place of work must be well ventilated, skin care measures should be adopted and safety goggles should be worn. According to the data available at our disposal, Styrofan® ID 604 ap is not a hazardous product as per guidelines for Classification, Packaging and Labelling of Dangerous Substances. Styrofan® ID 604 ap does not pose any risk to health when it is used for the purpose for which it is intended and principles of sound industrial practice are observed.

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**Storage**

Provided that Styrofan® ID 604 ap is stored in tightly closed containers or tanks and not kept under direct sunlight, it has a shelf life of approximately 6 months. Styrofan® ID 604 ap should not be allowed to come into contact with any unprotected metals except stain- less steel during storage and processing. Styrofan® ID 604 ap is adequately preserved for transport purposes. In order to protect the product from micro-organism attack during subsequent storage of the finished product, it is necessary to add further preservatives.

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**Note**

The information submitted in this publication is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation' s are observed.

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