

TECHNICAL DATA SHEET

Issue No
004/01

Revision Date
01.10.2022

Product Name

TECHNIC® B21S

Classification

Dry Bonding Agents.
Styrenated Resorcinol Formaldehyde Resin
Resorcinol Donor / Methylene Acceptor
Formaldehyde, polymer with 1,3-benzenediol and ethenylbenzene

Composition

Styrenated Resorcinol Formaldehyde Polymer

Physical Properties

Form	: Pastilles
Colour	: Red - Dark Brown
Specific Gravity @ 25°C	: 1.30 (Typical)

Chemical Properties

Softening Point (°C)	: 100 - 110
PH (50% alcohol sol ⁿ)	: 4.0 – 6.0
Moisture Content (KF)	: 0.7% max
Ash Content (850°C/1hr)	: 0.1% max
Free Resorcinol Content	: 8% max

Solubility

Water	: Partially Soluble
Alcohol	: Completely soluble
Ketones	: Completely soluble
Aromatic Solvents	: Insoluble

Storage Properties

TECHNIC B21S is comparatively very less hygroscopic in comparison to other resorcinol formaldehyde resin. Although for best results it must be protected from exposure to relative humidity. The resin should be stored in a cool dry place. The resin is stable for one year in protected as per directions above.

Processing Behavior

It is safe in processing.

Recommended Dosage

Between 3 to 4 phr is normally recommended for the Dry Bonding System.

Advantages

TECHNIC B21S is a reaction product of formaldehyde with resorcinol, resorcinol polymers and styrene. It is supplied in pastille form. It has low vapour pressure, thus, the fuming and weight loss that occur with processing resorcinol at temperatures above 150oC is substantially reduced with the usage of TECHNIC B21S.

Technological Properties (Usage)

TECHNIC B21S can be used as a resorcinol component of the Dry Bonding system for adhesion of synthetic tyre cord and brass plated tyre cord to rubber. It offers a balanced combination of good adhesion and excellent flex fatigue resistance in conjunction with methylene donors like formaldehyde, Hexamethylenetetramine and Hexamethoxymethylolmelamine Resin through formation of an in – situ resin. The product contains nil formaldehyde.

Handling precaution

Standard protective equipment to avoid contact with Skin and eyes should be used during handling. May be Irritating to eyes and skin. Washing with plenty of water is advised to be followed by a medical check up. Refer MSDS for more details

Packaging

Packed in 25 kg net weight HDPE laminated kraft paper bag.

Shelf Life

The resin is stable for 2 (two) years from the date manufacturing. It should be stored under recommended conditions.

Note:

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