



Protobind™ 2000

Renewable Raw Materials for Sleeves/Fluxes

Protobind™ 2000, high purity natural polyphenolic material specially formulated for use in Phenol-Formaldehyde powder resin for various applications.

Protobind™ 2000 is characterized for its low softening temperature. It is suitable for replacement of powder PF resins, such as those used in exothermic & insulating sleeves, resin based binder for fluxes etc.

To initiate the development work, replacement of PF resin with **Protobind™ 2000** is up to 15 -20% level based on formulation since sleeves have controlled burning & exothermic properties with high thermal stability to prevent dilation. In sleeves, general usage of PF powder resin varies from 1.5% - 6%, while no alteration is there in sleeves manufacturing process after incorporating **Protobind™ 2000**. Substitution with **Protobind™ 2000** helps to reduce the cost of sleeves without compromising on quality.

Protobind™ 2000 along with PF powder resin can be used to manufacture exothermic & insulating sleeves of all required sizes & shapes.

Sleeves are used to ensure proper feeding of the castings while reducing the size of the sand riser.