

Protobind™ KW

Protobind™ KW is a kraft hardwood lignin that can be used in various applications. It is a non-toxic product from renewable sources. **Protobind™ KW** can be used to replace and to reduce the usage of certain petrochemicals without compromising the performance.

TYPICAL END USES

- Antioxidant
- Board Binder (PF, UF, MF, RF, ...) Phenol replacement in PF resin
- Tires
- Concrete
- Asphalt
- Carbon Fiber
- Grease
- Dispersant
- Emulsifier
- Foams/Plastics/Polymers (PU, Epoxy resins, ...)
- Paper-based Laminate
- Chemicals: Cresols, Catechol, Resorcinol, Quinones, Vanillin, Guaiacols
- Battery
- Fuel

TYPICAL PROPERTIES

% Solids.....	> 95	Specific surface Area, m ² /kg.....	> 1000
% Ash (800°C)	< 6.0	% Solubility in water (acid or neutral).....	NIL
% Total lignin	> 85	% Solubility in water (alkali)	> 99%
pH (10% aq. Suspension)	~ 5.0	% Solubility in DMF.....	> 95%
Number Avg. Molecular Wt. (Mn).....	900-1300	% Solubility in DMSO.....	> 95%
Weight Avg. Molecular Wt. (Mw).....	2900-4500	Glass Transition Temperature, °C.....	115 - 140
Bulk Density, kg/L	~ 0.40	Aliphatic OH content, mmol/g	1.2—1.5
Particle Size Distribution (Dv50, µm).....	<30	Phenolic OH content, mmol/g.....	3.9—4.4
Particle Size Distribution (Dv90, µm).....	<50	Acid OH content, mmol/g.....	0.7—1.0

HANDLING

This product has to be used and disposed of according to the indications given in its safety data sheet.

STORAGE RECOMMENDATION

- Ensuring stock is kept at a moderate temperature (5 –40°C).
- Shelf life of min. 2 year if stored in a dry, cool area in its original closed packaging.

PACKAGING

- Bags: 25 kg
- Pallets: 500 kg (20 x 25kg bags)
- Jumbo Bags: 500 kg, 1200 kg

FOR MORE INFORMATION

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