

# PHENODUR® PR 722/53BG/B

## TYPE

Curable unplasticized phenolic resin

## FORM OF DELIVERY (f.o.d.)

53 % in butyl glycol / butanol (53BG/B)

## USES

Heat-curing phenolic-epoxide resin-combinations for interior and exterior coatings of metal packaging containers employed in the food industry; high adhesion, chemical resistant protective coatings for apparatus, vessels and pipelines.

## PRODUCT DATA

Determined per batch:

Dynamic Viscosity (Ubbelohde) DIN 53177  
dynamic viscosity [mPa.s] 1500 - 2800  
(23 °C)

Non-Volatile Matter DIN EN ISO 3251  
non-volatile matter [%] 49,0 - 53,0  
analogue DIN EN ISO 3251  
(1 h; 125 °C; 1 g; B)

Iodine Colour Number DIN 6162  
iodine colour number <= 10

## DILUTABILITY

white spirit	» butyl acetate	}
solvent naphtha	} methoxypropanol	}
methyl ethyl ketone	} methoxypropyl acetate	}
acetone	} butylglykol	}
cyclohexanon	} ethanol	}
ethyl acetate	} butanol	¾

} = unlimited dilutability

½ = substantial dilutability

¾ = limited dilutability

» = very limited or no dilutability

## COMPATIBILITY

% Phenodur PR 722	90	75	50	25	10
% other binder	10	25	50	75	90
Phenodur PR 217, PR 285	} }	} }	} }	} }	}
Phenodur PR 308, PR 373, PR 401, PR 404	} }	} }	} }	} }	}
Phenodur PR 612, PR 723, PR 897	} }	} }	} }	} }	}
Beckopox EP 301, EP 304, EP 307, EP 309	} }	} }	} }	} }	}

} = definite compatibility

» = very limited or no compatibility

## PROPERTIES AND USES

Phenodur PR 722 is used preferably in combination with higher molecular epoxide resins for interior protective stoving coatings in sheet-metal packaging containers and for chemically resistant stoving coatings.

### Can coating

After being stoved, combinations of 20 - 45 % Phenodur PR 722 and 80 - 55 % Beckopox EP 307 or Beckopox EP 309 (solid resin in each case) yield highly flexible, chemically resistant interior coatings with good adhesion for cans, tubes and other packaging containers employed in the food and luxury commodity industries. An addition of acid catalysts, e. g. Additol XK 406 (3 - 6 % relative to the solid resin constituent) increases the reactivity of the lacquers and thus the film hardness.

### Chemically resistant protective coatings

In principle Phenodur PR 722 can also be employed as sole binder for highly resistant stoving coatings. Being relatively brittle, however, the stoved films are used only on rigid substrates. Coatings of this type are employed for instance as chemically resistant linings for vessels, equipment and pipelines in the chemical industry. Combinations with high molecular weight epoxide resin, in which the phenolic resin is the main constituent have proved successful for acid-resistant films.

### Stoving conditions

Depending on the form of use the stoving conditions vary between 30 and 10 minutes at 170 - 210 °C. In multiple layer coatings, the bottom coatings are not subjected initially to complete curing. The coating system as a whole is completely cured when the final coat is stoved.

## PROCESSING

Glycol ethers, esters, diacetone alcohol and higher ketones are suitable as solvents and diluents. Aromatic hydrocarbons can be used as thinners. The resin can be pigmented with inert pigments and extenders.

## STORAGE

At temperatures up to 25 °C storage stability packed in original containers amounts to at least 365 days.

## DISTINGUISHING FEATURES

Phendour PR 722 is higher reactive than Phenodur PR 612 and Phenodur PR 897; less reactive than Phenodur PR 285 and PR 401.