DUROFTAL® PE 6607/60BGMP

Technical Datasheet

PRELIMINARY PRODUCT INFORMATION

TYPE

Oil free polyester resin, water dilute able after neutralization with amines

FORM OF DELIVERY (f.o.d.)

60% in butyl glycol / methoxy propanol (60BGMP)

DEVELOPMENT PRODUCT

This product is serving for trial purposes only. Deviations which might occur during transfer into manufacturing in a commercial scale are possible and do not constitute any material defect.

TENTATIVE PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219 dynamic viscosity (25 1/s; 23 °C)	[mPa.s]	500 - 2000
Acid Value DIN EN ISO 2114 acid value (non volatile matter)	[mg KOH/g]	20 - 30
Non-Volatile Matter DIN EN ISO 3251 non-volatile matter (1 h; 125 °C; 1 g)	[%]	58 - 62

Not continually determined:

Density (Liquids) DIN EN ISO 2811-2 density approx. (20 °C)	[g/cm³]	1,10
Flash Point DIN EN ISO 1523 flash point approx.	[°C]	55

SUGGESTED USES

Duroftal PE 6607/60BGMP has been especially developed as a replacement of epoxy resins for interior and exterior coatings for metal packaging goods (can coating). When combined with phenolic resins or amino resins, these lacquers neither contain BADGE, nor Bisphenol A.

PROCESSING

Combinations of Duroftal PE 6607/60BGMP with suitable phenolic resins have to be stoved for 10 - 20 min. at 190 - 210 °C to be fully cured. The mixing ratio between Duroftal PE 6607/60BGMP and the phenolic resin should be approx. 75 : 25 (calculated as solid resins).

The addition of phosphoric acid based catalysts, e. g. Cycat XK 406 N (formerly Additol XK 406 N) in concentrations of 3 % (f.o.d.) calculated on total binder solid enhances crosslinking density and hardness and improves retort resistance.

DISTINGUISHING FEATURES

In comparison to the Duroftal grades VPE 6104/60MPAC and PE 6160/50MPAC, PE 6607/60BGMP is water dilute able after neutralization with amines. Neutralizing or adjustment of the pH-value should be done with di-methyl-ethanol-amine (DMEA) or with AMP (2-Amino-2-methyl-1-propanol).

Combinations of Duroftal PE 6607/60BGMP with phenolic resins lead to coatings with a higher flexibility than Duroftal VPE 6104/60MPAC based lacquers, but to a somewhat lower flexibility of those varnishes, which are prepared with Duroftal PE 6160/50MPAC.

In comparison to epoxide resins like Beckopox EP 307 and EP 309, the properties of BADGE & Bis.A - free lacquers containing Duroftal PE 6607/60BGMP are comparable when combined with an appropriate phenolic resin.

Additionally, the solid content of lacquers based on Duroftal PE 6607/60BGMP + phenolic resin is significantly higher than the solid content of epoxide + phenolic resin combinations.

STORAGE

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

REMARK:

Data contained in this publication are based on careful investigations (and are intended for information only). Due to scale up of this product there is not yet sufficient experience concerning serial production. We can therefore not exclude, that based on future knowledge product data and other indicated properties in upcoming Technical Data Sheets will be subject to change. We reserve the right to leave the product name unchanged, even if product data or other indicated properties will vary from the present product info. Regardless of the data contained in this publication any user is obliged to carry out tests under his own responsibility as to the suitability of the product for a particular use and to investigate the possible violation of industrial property rights of third parties. Information is therefore not binding and cannot be construed as guaranteeing specific properties of products. We apply our General Sales Conditions.