# POLYPLEX 6036 D ABU (WINTER)

Technical Datasheet

## PRODUCT CODE: 059805A

POLYPLEX 6036 D ABU (Winter) is a medium reactivity, white pigmented, rigid orthophthalic polyester resin that has been formulated for the reinforcement of thermoformed acrylic, and co-extruded ABS-acrylic items. It is suitable for use in the manufacture of sanitaryware items including vanity units, shower bases, baths and spas. The resin is thixotropic and pre-promoted as supplied, and has been formulated for blending with mineral fillers such as calcium carbonate. Depending on the type and grade of calcium carbonate used, sprayable blends with filler levels up to 55% w/w can be achieved. The resin is intended for spray or hand laminating applications.

POLYPLEX 6036 D ABU (Winter) contains a barrier additive which gives the cured laminate a tack-free surface.

POLYPLEX 6036 D ABU (Winter) shows good adhesion to most grades of thermoformed acrylic, however due to variations in grades of sheet, it is recommended that test laminates be prepared on thermoformed sheet prior to commencing large scale production. Similarly, laminate adhesion to thermoformed ABS-acrylic sheet should be confirmed before commencing larger scale production.

## FEATURES

- Positive Cure properties following gelation
- Thixotropic, low viscosity under high shear
- Good adhesion to most grades of acrylic sheet. Good adhesion to selected ABS-Acrylic grades.
- Fillable - high mineral filler capacity.

## BENEFITS

- Suitable for acrylic back up laminating processes where high production rates are required
- Excellent sprayability. Rapid Glass wetout and minimal drainage in inclined surfaces
- Minimal Reject rate

## TYPICAL LIQUID RESIN PROPERTIES at 25 deg C

| PROPERTY | TYPICAL VALUE | TEST DETAILS |
|---|---|---|
| Appearance | Opaque bluish white liquid | |
| Viscosity | 800 - 1000 cP | Brookfield LVT sp.2/12 rpm |
| Gel Time | 8 - 11 minutes | 100 grams filled resin mix + 1.5% MEKP NR20<br>Resin filled with 50% w/w Omycarb 5 |
| Density | 1.10 gcm $^{-3}$ | |
| Flash Point | 31°C | |
| Volatile Content | 43 - 46 % | |
| Shelf Life | 6 months | Stored in original closed container in shade |

Typical values: Based on materials tested in our laboratories, but varies from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

## TYPICAL MECHANICAL PROPERTIES - CURED CASTINGS

| PROPERTY | TYPICAL VALUE | TEST DETAILS |
|---|---|---|
| Density | 1.19 | ISO/R 1183-1970 |
| Tensile Strength | 50 MPa | ISO R527-2 |
| Flexural Modulus | 3500 - 4000 MPa | ISO 178 |
| Flexural Strength | 80 MPa | ISO 178 |
| Volume Shrinkage | 7 - 8% | ISO 3521-1976 |
| Barcol 934-1 Hardness | 40 | Barcol Impressor |

## ADDITIONAL INFORMATION

When a laminate is built up in stages with intermediate curing, each operation should be finished with a normal resin/glass fibre ratio. Cured surfaces should be abraded, (to ensure optimum secondary bonding) if further laminates are to be applied.

Apart from Curox NR20, other suitable initiators that can be used with this resin include: Curox M200, Butanox M50 and Norox MEKP 9.

## STORAGE AND HANDLING

To ensure maximum stability and maintain optimum resin handling properties, polyester resins should be stored in closed containers, away from heat sources and sunlight. The resin should be stored away from all sources of ignition. Stored resin quantities should be kept to a reasonable minimum and used on a first in/first out stock rotation basis.

## STANDARD PACKAGING

Mild steel drums (225kg)

Always refer to the MSDS before use