

# Product Data Sheet

## POLYPARK 3.41

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### Description

**POLYPARK 3.41** is an isophthalic based low viscosity and high reactivity unsaturated polyester resin, non accelerated

### Applications

**POLYPARK 3.41** contains no filler and it is ideal for areas where strength and transparency are necessary:

- FRP-GRP
- Laminating
- Casting
- Solid Surface
- Gelcoat

### Principal properties

- Very good heat resistance and chemical resistance
- Excellent water resistance
- High surface quality (modification is necessary)
- Excellent adhesion to glass fiber

### Product specifications upon delivery

| Property                        | Value     | Unit    | TM         |
|---------------------------------|-----------|---------|------------|
| Viscosity <sup>(1)</sup>        | 400±50    | mPa.s   | ASTM D2196 |
| Acid value                      | <20       | mgKOH/g | ASTM D1639 |
| Appearance                      | ~Clear    | -       | -          |
| Color                           | Max 3     | Gardner | ASTM D1544 |
| Solid content                   | 62±2      | %       | ASDM D1259 |
| Gel time <sup>(2)</sup>         | 15±5      | min     | ASTM D2471 |
| Cure time <sup>(2)</sup>        | 18±8      | min     |            |
| Peak temperature <sup>(2)</sup> | 185±15    | °C      |            |
| Density                         | 1.15±0.05 | g/cm3   | ASTM D1298 |
| Flash point                     | 35        | °C      | ASTM D1310 |

#### Remarks

- (1) Viscosity: @ 25°C Brikfield, RPM 40 SPDL 2  
(2) Reactivity determined @ 25°C with 1g CO 1% and 1,5g MEKP M50 added to 100g resin.

### Properties of cast unfilled resin (typical values)

| Property                         | Value     | Unit   | TM         |
|----------------------------------|-----------|--------|------------|
| Tensile strength <sup>(1)</sup>  | Min. 75   | MPa    | ASTM D638  |
| Tensile modulus                  | 2.5±0.5   | GPa    | ASTM D638  |
| Elongation at break              | 3,3±0.7   | %      | ASTM D638  |
| Flexural strength <sup>(1)</sup> | Min. 120  | MPa    | ASTM D790  |
| Flexural modulus                 | 3,5±0.5   | GPa    | ASTM D790  |
| Molding shrinkage                | Max. 4    | %      | ASTM D2566 |
| Hardness <sup>(1)</sup>          | Min. 40   | Barcol | ASTM D2583 |
| HDT <sup>(1)</sup>               | Min. 80   | °C     | ASTM D648  |
| Water abs. <sup>(1)(2)</sup>     | Max. 0.13 | %      | ASTM D570  |

#### Remarks

- (1) Sampling: 24hr @ ambient temperature and 2hr at 130°C  
(2) Determined after 24hr immersion in water at ambient temperature

### Packaging

Steel drum of 220 kg net

### Safety precautions

- Avoid direct contact with skin and eyes.
- Necessary eye and body protection should be used.
- Keep container sealed to prevent moisture pick up and monomer loss.
- This product is flammable.

### Storage

The resin should be stored indoors in the original, unopened and undamaged containers in a dry place. Storage temperature should be between 5°C and 25°C. Shelf life will reduce at higher temperatures. Exposure to direct sunlight should be avoided.

### Shelf life

Under the stipulated storage conditions, shelf-life is 6 months from last quality control date.

#### Note

The information given above is correct to the best of our knowledge without any guarantee. Users should determine the suitability of this product for their purposes by arranging appropriate tests. LLC POLYPARK company does not take responsibility for any inadequacies that may occur due to improper storage, handling and / or application.