

PUG-800 / PUG-732 / PUG-7321

DESCRIPTION

The PUG-800, PUG-732 and PUG-7321 are un-promoted, high viscosity, unsaturated polyester resins.

FEATURES AND BENEFITS

- Good wet out/roll out properties
- Acceptance of styrene monomer not more than 30-40% by weight.
- Good Mechanical properties.
- Moderate hardness development.
- Low color.

APPLICATIONS

- GP laminating, FRP parts, Hand lay-up, Spray-up.
- Decorative figures.

TYPICAL LIQUID PROPERTIES

| Property | Units | PUG-800 | PUG-732 | PUG-7321 | Test Method |
|------------------------|-----------------|-------------------|-------------------|--------------------|-------------|
| Acid number (Solution) | Mg KOH/g sample | 40 máx. | 37 máx. | | TARQ – 100 |
| Non-volatile content | % | 78-82 | 74-76 | 70-74 | TARQ – 204 |
| Gardner viscosity | — | Z4-Z6 | Z1-Z4 | Z-Z2 | TARQ – 310 |
| Gel time | Min. | 7-11 ² | 6-10 ¹ | 15-20 ² | TARQ – 400 |
| Cure time | Min. | 24-32 | 20-30 | 27-38 | TARQ – 400 |
| Exothermic Peak | °C | 160 max. | 145-170. | 160 max. | TARQ – 400 |
| Gardner color | — | — | — | 1.5 max. | TARQ – 600 |
| Apha color | — | 80 max. | 90 max. | — | TARQ – 610 |
| Stability at 120°C | Hours | 1 max. | 1.5 max. | | TARQ – 660 |
| Appearance | | Clear | | | Visual |

¹ Dilute to 60% solids, 0.25% Co (12%), 1% RR catalyst @25°C; ² Dilute to 60% solids, 0.25% Co (12%), 1% Butanox M-50 catalyst @25°C.

NOTE: Tests results compared with the reported in certificate can be affected due to: batch age, temperature, moisture, type and amount of catalyst, testing equipment and method.

PHYSICAL PROPERTIES

Physical properties are shown for fiberglass laminate: These are typical values and are provided for reference only.

| Property | Units | PUG-800 | PUG-732 | PUG-7321 | Test Method |
|-------------------|-------|------------------------|---------|----------|-------------|
| Tensile Strength | Psi | 16,753 | | | ASTM D-638 |
| Tensile Modulus | Psi | 1.9 x 10 ⁶ | | | ASTM D-638 |
| Elongation | % | 1.5 | | | ASTM D-638 |
| Flexural Strength | Psi | 24,232 | | | ASTM D-790 |
| Flexural Modulus | Psi | 1.16 x 10 ⁶ | | | ASTM D-790 |
| HDT @ 1.82 MPa | °C | 54 | | | ASTM D-648 |
| Barcol hardness | — | 40 | | | ASTM D-2583 |

- 1.- Laminate construction: 30% fiberglass to resin ratio.
- 2.- Laminate cured overnight at room temperature and postcured at 65°C for 5 hours.
- 3.- HDT is evaluated at neat resin casting.

RECOMMENDATIONS

- 1.- The catalyst level should not exceed 2.8% or fall below 1% for proper cure.
- 2.- These products should not be used when temperature conditions are below 16°C, as curing and handling may be adversely affected.
- 3.- Do not add any material different to the catalyst recommended for these products.
- 4.- Do not mix organic peroxides with metallic soaps, amines or any type of accelerators or promoters, because it can result on violent decomposition with fire or explosion.
- 5.- Any additional questions, please contact your Reacciones Químicas SA de CV sales representative.

STORAGE

Uncatalyzed PUG-800, PUG-732 and PUG-7321 resins, have a usage life of three months from invoice date, when stored at 25°C or below, in a closed, factory sealed opaque containers, and out of direct sunlight, heat sources or moisture. For every 7°C increase in storage temperature, the shelf life is reduced by one half.



SAFETY AND HANDLING

Detailed information for safe handling of PUG-800, PUG-732 and PUG-7321 resins, can be found on its SDS. For more information, please contact your Reacciones Químicas SA de CV sales representative.

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