

PROVISIONAL TECHNICAL DATA SHEET

R694PA

Teraphthalic Laminating Resin

Revised: 28/03/2025

DESCRIPTION

R694PA is a high quality teraphthalic based, pre-accelerated, unsaturated polyester resin suitable for the manufacture of laminates in a wide range of applications. It has higher impact resistance than general Orthophthalic resins

Characteristics & Advantages:

- Suitable for Hand-Lay-Up and Spray-Up Applications
- Excellent wet-out
- Tough flexible resin
- Very stable with low shrink
- Low water adsorption

TYPICAL LIQUID RESIN PROPERTIES

Viscosity @ 25°C	350 – 500 cps
Thixotropic index	1.4 – 2.1
Solid content	58.5 – 65.5
Curing Characteristics	
Mass of resin	100g
Accelerator Quantity	Pre-accelerated
Catalyst Type	MEKP (9% Active O ₂)
Catalyst quantity	2 g per 100g neat resin
Gel time @ 25°C @ 2% Akperox A50	10 - 15 minutes

TYPICAL PHYSICAL PROPERTIES:

Typical properties of R694PA	
Prepared, post-cured in accordance with SABS 713-1974, as amended	
Temperature of deflection – under load (1.80MPa), °C	60 - 65
Barcol (GYZJ 934-1) hardness	35 - 45
Tensile strength, MPa	65
Tensile Modulus MPa	3800
Elongation @Break %	3-4
Water adsorption after 7 days, mg	19

SUBSTANCE IDENTITY NUMBER

UN 1866

MARKING

UNSATURATED POLYESTER (UP)

SHELF LIFE

4 Months from production date when stored as indicated.

Packaging

R694PA is normally supplied in 225kg new steel drums with close top, as well as 25kg and smaller.

Other Version

R694PA can be supplied as a white version i.e. **R694P1**,

MATERIAL SAFETY, STORAGE and HANDLING:

The resin should be stored below 25°C, away from heat sources, direct sunlight and rain, in a closed opaque container.

- Polyester resin solutions contain volatile and flammable monomers such as styrene (Flash Point 32°C). They are subject to the Highly Flammable Liquids and Liquid Petroleum Gases Regulations 1972.
- All polyester resins should be handled and used in well ventilated, flame proof areas.
- It is preferable to wear gloves and goggles to guard against any skin / eye irritation arising from the presence of styrene.
- AVOID DIRECT MIXING OF ANY ORGANIC PEROXIDE (CATALYST) WITH METAL SOAPS, AMINE OR ANY OTHER POLYMERISATION
- ACCELERATOR OR PROMOTER, AS VIOLENT DECOMPOSITION WILL RESULT! Under no circumstance must accelerators be mixed with peroxide catalysts directly as the mixture can explode. A Material Safety Data Sheet is available from your Atlin Chemicals representative. Make certain that you obtain a copy and that its contents are understood before work commences.

For any additional information, please contact Atlin Chemicals at one of our branches:

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