

Uniplast Polystyrene Scintillator

1. Scintillation mixture:

- polystyrene Styrolution 124N – 98.0-98.5%
- p-Terphenyl (CAS 92-94-4) – 1.5-2.0%
- POPOP (CAS 1806-34-4) – 0.01-0.04%

2. Physical properties:

Density, g/cm ³	Refractive Index	Coefficient of Linear Expansion	Temperature Range
1.03–1.06	1.62–1.64	$8 \cdot 10^{-5} \text{ }^{\circ}\text{C}^{-1}$	–60 to +80°C (acceptable) –20 to +60°C (recommended)

3. Scintillation properties:

Light Output, % Anthracene	Decay Time, ns	Wavelength of Max. Emission, nm	Light Attenuation Length, cm (1x20x200 cm samples)	Main Applications
60–70	2.5	430	>200	α , β , γ , fast n

4. Size range:

- height: 0.5 mm to 20 mm
- width: 1 mm to 350 mm
- length: 1 mm to 5000 mm