

## Technical Data Sheet

### Smart Roofer

**SMART ROOFER RESIN** is a thixotropic, pre-accelerated, low styrene emission general purpose polyester resin, with a short geltime. PET content is 22%.

When applying **SMART ROOFER RESIN** styrene emission is reduced by up to 50% compared to standard resins. Emission is only 2-5% of polyester resin used compared to 5-10% of standard polyester resin.

#### Typical Liquid Resin Properties

Property at 23°C	Typical value	Unit	Method
Viscosity, Brookfield RV2, 10 rpm	1400	mPas	ISO 2555
Viscosity, Cone & Plate	210	mPas	ISO 2884
Non-Volatiles	57,5	%	ASTM D 1644
Gel Time, 1,5% MEKP-50	25	min	Hc-04a
Peak Exotherm Temperature	155	°C	Hc-04a

#### Typical Cured Resin Properties

Property(1)	Value	Unit	Method
Tensile Strength	60	MPa	ISO 527
Tensile Modulus	3200	MPa	ISO 527
Elongation at Break	2,1	%	ISO 527
Flexural Strength	100	MPa	ISO 178
Flexural Modulus	3000	MPa	ISO 178
Heat Deflection Temperature (HDT)	70	C	ISO 75/2 (A)

(1) Clear casting physical properties cured using 1,0% MEKP-50 catalyst. Post cured at 50°C for 24 hours. HDT sample post cured at 70°C for 24 hours.

Application and Use	<b>SMART ROOFER RESIN</b> is suitable for GRP flat roofing and spray-up, hand lay-up and filament winding methods for manufacturing numerous FRP products for the building, construction, and transportation markets.
Certificates and Approvals	The manufacturing, quality control and distribution of products, by <b>SMART ROOFER LTD</b> are complying with ISO 9001 standards.
Handling and Storage	It is highly recommended that all material is stored at stable temperatures under 25°C preferably indoors, and away from direct sunlight. Prolonged storage outside of recommended conditions can influence liquid resin properties like viscosity and gel time. It is also strongly recommended to mix resin thoroughly before use. Shelf life of <b>SMART ROOFER RESIN</b> is six (6) months.
Notice	<p>All information presented herein is believed to be accurate and reliable, and is solely for the user's consideration, investigation, and verification. The information is not to be taken as an express or implied representation or warranty for which <b>SMART ROOFER LTD</b> assumes legal responsibility. Any warranties, including warranties of merchantability, fitness for use or non-infringement of intellectual property rights of third parties, are herewith expressly excluded.</p> <p>Since the user's product formulations, specific use applications and conditions of use are beyond the control of <b>SMART ROOFER LTD</b>, <b>SMART ROOFER LTD</b> makes no warranty or representation regarding the results which may be obtained by the user. It shall be the sole responsibility of the user to determine the suitability of any of the products mentioned for the user's specific application.</p> <p><b>SMART ROOFER LTD</b> requests that the user reads, understands and complies with the information contained herein and the current Material Safety Data Sheet.</p>