

# **SolarRoll PE 55**

(Formerly Solartech PE55)

**Multi-purpose Polyester Laminate** 

### UV CURING COMPOSITES

#### **Product Information Leaflet**

**SolarRoll PE 55** is a UV Curing GRP (Glass Re-inforced Plastic) Laminate containing high grade Isophthalic polyester resins, fillers and glass re-inforcements which has been formulated to ensure excellent protection against corrosion, abrasion, impact and aggressive climatic environments.

**SolarRoll PE 55** is suitable for use on a wide range of substrates including steel, concrete, GRP, FRP, PVC glass and wood. The product is supplied on rolls and in its un-cured state is a soft, maleable, easy to use material ready for application. The material can be easily cut to any shape using knives or scissors. Once fully cured SolarRoll PE 55 also provides top quality fire retardancy and low smoke emissions if exposed to flame.

SolarRoll PE 55 is highly recommended for use as protection to all types of insulation and also as a non-metallic cladding product. Extensive testing has been carried out to confirm conformance to offshore Fire and Smoke regulations.

The ability to offer user friendly, one component, fast curing, seamless on site applications has attracted many clients to use the SolarTech UV Curing technology.

#### **Typical Applications:**

- All types of Insulation Protection
- Storage Tanks
- Pipe Support Protection
- Roofs
- Flooring
- Water and Weatherproofing
- General maintenance

And many others....









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<b>Product Data</b>		
	Sheet Lamination	
Appearance Colour		
Mix Ratio	Grey	
	One Component	
Curing Mechanism	Ultra Violet (UV). Natural or UV Lamp	
Material Thickness	Standard 1.8mm(70mils). Available range: 1.5mm-2.5mm (60-100mils)	
Weight	2.9kg/m² Standard	
Packaging	Standard Roll 10mtr x 1mtr and 10mtr x 600mm	
Technical Data		
	Typical Values	Test Method
Tensile strength	55 Mpa (7970 psi)	BS 2782 - 1994
Flexural strength	> 130 Mpa (>18,800 psi)	ASTM D790 - 03
Flexural Modulus	5.98 Gpa (8.6x105 psi)	ASTM D2344
Elongation at break	> 3%	BS 2782 - 1994
Coeff. Of Thermal expansion	2.9 10-5 Degree C	ASTM D696-03
Impact resistance	> 60 Kj/sqm	BS EN ISO 180
Hardness	> 60 Barcol	ASTM D2583-01
Compression strength	> 200 Mpa (29,000 psi)	ASTM D695-2002a
Adhesion to steel	> 14 Mpa (>2000 psi)	ASTM D4541-02
Water Vapour Permeability	0.28g/m2/24h/mmHg (0.18perm)	ASTM E96
Heat distortion	> 145 Deg C (>293 F)	ASTM D648
Fire rating	ASTM E84 CLASS A, BS 476pt 7 CLASS 1,	
	IMO RESOLUTION MSC307 (88)(2010FTP CODE)	
	ANNEX 1: PART 2 & PART 5	
Flash Point	> 32 Deg C (> 90F)	ASTM D93
Heat resistance	Wet: 90 deg C (195F)	Dry: 200 Deg C (390F)
Chemical resistance	Good. Chemical resistance chart av	ailable on request
Electrical Properties	Dielectric strength: 9KV/mm as per IEC 243	
Arc resistance:	greater than 180 seconds as per ASTM D495	
Tracking resistance:	greater than 600 volts as per IEC 112	
Insulation resistance:	10 to the power of 13 ohms as per IEC 93	
Application Data		
	Please refer to the SolarTech Sheet Laminate 'Information for Use 'leaflet.	
	Available from your Solartech agent or from Solartech web site www.solartechuv.com	
Handling / Storage		
Working life	Vigilant care should be taken to shield SolarRoll PE 55 from direct sunlight or UV	
		greatly reduce the working life of the material.
Environment	Under no circumstances should SolarRoll PE 55 be applied in wet conditions	
	or on wet substrates.	
Safety Precautions	Please refer to the product Material Safety Data Sheets for detailed information	
Salety i resautions	on handling, shipping and disposal.	
Storage	Store in cool, dry conditions ( not more than 25 Deg C (77 Deg F).	
Storage	Avoid storage near any heat source or sunlight. Always store material in its	
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01 161 16	original packing in a horizontal position.	
Shelf Life	18 months when stored as per manufacturers instructions.	



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Note: SolarRoll PE55 is a product of Solartech International Ltd BVI company. This product is **EXCLUSIVELY** manufactured Under Licensed by Greentech Thermal Insulation Products Manufacturing LLC, U.A.E.