



# Sol+Guard™

© Plastipack Ltd

**The Best Cover for Solar Gains**

500 Micron



[www.geobubble.co.uk](http://www.geobubble.co.uk)

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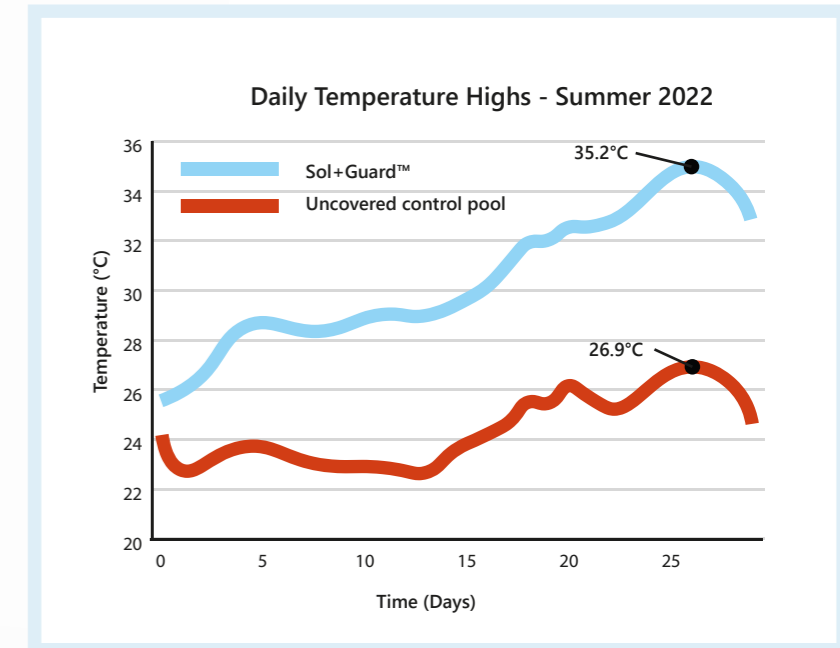
## Key Benefits:

- ☞ Increase water temperature by up to 8°C
- ☞ Reduce energy consumption by over 70%
- ☞ Reduce chemical consumption by up to 40%
- ☞ Eliminate evaporation by 98%
- ☞ Reduce debris contamination
- ☞ Save money and reduce the environmental impact of your pool
- ☞ 8+ years expected lifespan
- ☞ With GeoBubble™ Technology
- ☞ Pay back the cost of a cover within 1 year
- ☞ Available with reinforcing weave

## Sol+Guard™ increases pool temperature by up to 8°C

Sol+Guard™ is a high-performance solar pool cover designed specifically to maximise solar gains, and heat the water of the swimming pool. By raising pool temperatures by up to 8°C, this best-selling solar pool cover material helps to save energy, money and reduce the environmental impact of your pool.

In the summer of 2022, testing was conducted on outdoor test pools, located at our state-of-the-art testing facility in South East England. The scope of these tests was to determine the benefits of covering an outdoor pool with our Sol+Guard™ material with GeoBubble™ technology. In order to achieve this one test pool was fitted with a Sol+Guard™ cover fabricated in house, and another left uncovered to act as a control.



As shown in the above graph, the pool covered with Sol+Guard™ was consistently warmer than the uncovered control pool for the duration of the test.

The pool covered with the Sol+Guard™ achieved a maximum temperature variance of +8°C towards the end of the testing period. This shows that on the warmest days, and during extended periods of unseasonably warm weather, the solar gains achieved by using Sol+Guard™ can be significant.

Observed temperature gains when using a Sol+Guard™ cover are highly dependent on the local climate.



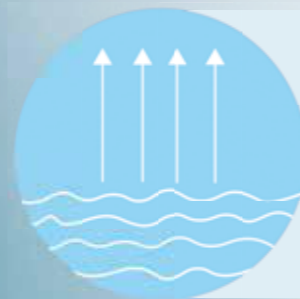
### Solar Gains

The Sol+Guard™ 500 micron transparent solar pool cover material transmits 80% of the sun's energy in the visual and IR spectrum through the material to heat the water and basin of the swimming pool. Tests in the UK have shown temperature increases of up to 6°C and testimonials from hotter climates estimate up to 8°C above the ambient pool temperature, reducing the heating demand by up to 70%.



### Heat Retention

The unique profile of the GeoBubble™ technology air cells provide this cover with both buoyancy and an insulative air gap to control heat transfer, enabling the material to manage the pool environment and keep the pool at the desired temperature.



### Prevents evaporation

The material provides a barrier to evaporation, giving the pool the ability to preserve water and reduce heat loss through evaporative cooling. Evaporative losses have the largest impact in maintaining a pool's temperature, responsible for 70% of the overall heat loss from an uncovered pool. Plastipack materials are tested to prevent over 98% of evaporative losses.



**"Sol+Guard™  
reduced my heating  
bill by 25%"**

**Bob Bowles,  
East Sussex, UK**





## Specification Sheet

<b>Polyethylene Film</b>	Dual-Extruded		
<b>UV Protection</b>	140 kLys/yr 0.9% Additive 180 kLys/yr 1.2% Additive		
<b>Colour</b>	Translucent Sea Blue		
<b>Thermal Properties</b>	Vicat Softening Point (1kg) 93°C		
<b>Cold Crack Temperature</b>	-25°C		
<b>500 microns thickness</b>	Bubble Film = 350 micron +/- 10%		
<b>*758 microns thickness</b>	Back film = 150 micron +/- 10%		
<b>Weight per m<sup>2</sup></b>	*Woven top layer = 258 micron +/- 10%		
	460gms +/- 10%		
	*637gms +/- 10%		
<b>Overall Bubble Width</b>	2000mm / 2500mm +/- 1%		
<b>Welding Edges</b>	30mm +/- 10%		
<b>Overall Width</b>	2060mm / 2560mm +/- 10%		
<b>Roll Diameter</b>	0.80m +/- 1%		
<b>Roll Length</b>	102m +/- 2%		
<b>Est. Quantity for 120m<sup>3</sup> truck</b>	2.5m = 14,535m <sup>2</sup> = 57 rolls 2m = 15,912m <sup>2</sup> = 78 rolls		
<b>Est. Quantity Containers</b>	20ft = 4,692m <sup>2</sup> = 23 rolls 40ft = 11,220m <sup>2</sup> = 55 rolls		
<b>Packaging</b>	Packaged in Polyethylene bags		
<b>Core Diameters</b>	Internal 76mm/External 80mm		
<b>Identification</b>	Batch Identification by Q.A. slip and label showing Length/Grade		
<b>Warranty</b>	8 year pro rata warranty		
<b>GEOBUBBLE™ TECHNOLOGY</b>			
<b>Bubble Width x Length</b>	15x30mm		
<b>Bubble Height</b>	5.5mm		
<b>No. of bubble per m<sup>2</sup></b>	1943		
<b>*WOVEN TOP SHEET</b>			
	<b>Material</b>	<b>Tensile Strength (N/m)</b>	<b>Tear Strength (N)</b>
<b>Warp</b>	HDPE	50	160
<b>Weft</b>	HDPE	50	160

**Company information:**  
[www.plastipack.co.uk](http://www.plastipack.co.uk)

**Product information:**  
[www.geobubble.co.uk](http://www.geobubble.co.uk)

**Water storage:**  
[www.vapourguard.co.uk](http://www.vapourguard.co.uk)

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