



NSG **glanova™**

Chemically strengthened glass is playing an increasingly important role in the smartphone, tablet and display industry and many glass solutions exist to support this.

NSG **glanova™** is a novel glass composition developed to meet the needs of this market and provide a unique combination of properties to display manufacturers.

NSG **glanova™** has been designed for manufacture using the float process, recognized as the most efficient method to make high volume, cost effective glass products with excellent quality.

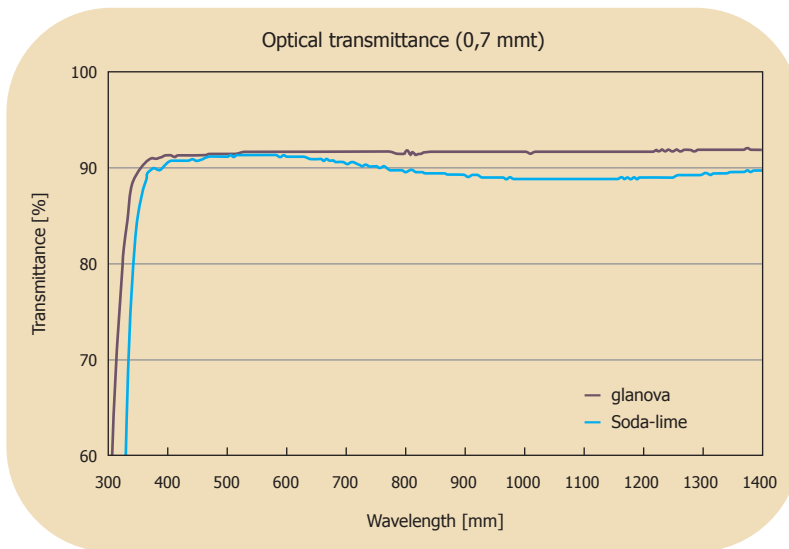
- Specially designed glass composition to provide excellent chemical strengthening performance
- Significantly improved strength as compared to soda lime glass in four-point bending, ring-on-ring and ball drop tests
- Low iron content provides high light transmission and excellent colour rendering of displays and screen prints
- Production of curved surfaces can be carried out at low bending temperatures (see below)
- Chemically durable
- Efficient manufacturing process combined with the above features, gives a cost effective product with excellent performance

Parameters	Unit	NSG glanova™
Glass properties		
Optical transmittance	%	≥ 91
Refractive index ($\lambda = 587,6 \text{ nm}$)	—	1,51
Density	g/cm^3	2,48
Young's Modulus	GPa	75,4
Poisson's Ratio	—	0,24
Dielectric constant @1GHz	—	6,9
Coefficient of thermal expansion (50 - 350°C)	$\times 10^{-7}/^\circ\text{C}$	91,8
Viscosity		
Softening point	$^\circ\text{C}$	742
Annealing point	$^\circ\text{C}$	552
Strain point	$^\circ\text{C}$	508
Chemical strengthening		
Compressive stress	MPa	600 - 800
DOL	μm	15 - 25
Vickers Hardness (before chemical strengthening)	kgf/mm^2	528
Vickers Hardness (after chemical strengthening)	kgf/mm^2	583
Dimensions		
Thickness	mm	0,28 - 2

Ease of processing: The temperature needed for bending and forming of NSG **glanova™** is approximately 700°C, almost the same as for soda-lime glass.

This is a significantly lower temperature than that of aluminosilicate glasses, meaning processing parameters and designs that were not previously possible with these glasses can be achieved. NSG **glanova™** is the best option where curved, round surfaces are required and gives new possibilities for chemically strengthened glass.





Features and benefits

- High quality
- Improved chemical strengthening performance and strength
- Easy to process
- Cost effective
- Available in thicknesses of 0,28 to 2 mm

Applications

- Smartphones and tablets
- Touch panels
- PC
- Automotive
- Industrial equipment

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