SOLAR MIRRORS

SUN MIROX™

EXTRA CLEAR EXTRA THIN GLASS FOR PARABOLIC DISH AND PARABOLIC TROUGH COLLECTORS

SUN MIROX™ is an extra clear extra thin high reflectivity mirror perfectly suited for lamination purposes and use in parabolic dish or parabolic trough collectors. Once laminated with an appropriate adhesive onto a support material the mirror is perfectly well protected and shows a very high chemical and mechanical durability.
SUN MIROX™ conforms to EN1036. AGC can help you to select an appropriate adhesive in function of your support structure.
In order to minimize its environmental impact before, during and after service, SUN MIROX™ is copper-free and lead-free.

PRODUCT DESCRIPTION

Type	Extra clear extra thin mirror (copper free and lead free)
Applications	Parabolic dish or parabolic trough (laminated)

AGC Solar has a long history as a key player in the solar glass business. As part of the world leader in glass production, it benefits from the latest glass technologies to make renewable energy a success. It offers glass solutions for photovoltaic modules, thermal collectors and concentrating solar mirrors. It aims for the highest production standards for increased performance and works through a worldwide network.

MAIN CHARACTERISTICS *

Energy reflectivity (%)	0.95mm: 95.1	ISO 9050 AM1.5
	1.25mm: 94.8	ISO 9050 AM1.5
Minimum curvature (m)	0.95mm: 3.5	Based on 10MPa as design stress
	1.25mm: 4.6	Based on 10MPa as design stress
Specific weight (kg/m²)	0.95mm: 2.4	
	1.25mm: 3.1	
Typical length	From 150mm to 3210mm	
Typical width	From 150mm to 1580mm	
	Other dimensions available on request.	

AGC can help evaluating these values according to other standards and/or to the specificities of the final application.

DURABILITY TESTS *

Humid chamber	Passed (not laminated)	EN1036
Neutral salt spray	Passed (not laminated)	ISO 9227
CASS	Passed (not laminated)	ISO 9227
Thermal cycling	Passed (not laminated)	From -20°C to +75°C, up to 100% RH
Weather O Meter	Passed (not laminated)	Combination of light, temperature and water
UV resistance	Passed (laminated)	UVA 340 at 60°C, 39W/m²

MECHANICAL CHARACTERISTICS - NOT LAMINATED *

Mechanical strength (MPa)		45	Annealed
Young modulus (GPa)		70	EN572
Poisson ratio		0.2	EN572
Hardness	Moh (scratch hardness)	6	EN572
	Knoop (identation hardness)	470	Indenter load 500g
Density (kg/m³)		2500	EN572, at 18°C

THERMAL CHARACTERISTICS *

Hemispherical emissivity	0.84	Between -18°C and 66°C
Expansion coefficient (10-6 1/K)	9	EN572, between 20°C and 300°C
Specific heat (J/kg/K)	720	EN572
Thermal conductivity (W/m/K)	1	EN572
Softening point (°C)	722	
Annealing point (°C)	552	
Strain point (°C)	500	

CHEMICAL COMPOSITION *

Silicon dioxide (SiO2, %)	69 to 74	EN572
Sodium oxide (NaO, %)	12 to 16	EN572
Calcium oxide (CaO, %)	5 to 12	EN572
Magnesium oxide (MgO, %)	0 to 6	EN572
Aluminium oxide (AI2O3, %)	0 to 3	EN572
Trace elements (FeO, etc., %)	<1	

AGC is commited to environmental stewardship through the use of recyclable materials and sustainable process in the manufacturing and distribution of our state-of-the-art, energy efficient flat glass products.
In North America, the product performs to the appropriate ASTM standards.
**The information contained in this datasheet is intended to assist you in designing with AGC materials. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose. The user is responsible for determining the suitability of AGC materials for each applications.*

FOR MORE INFORMATION

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