

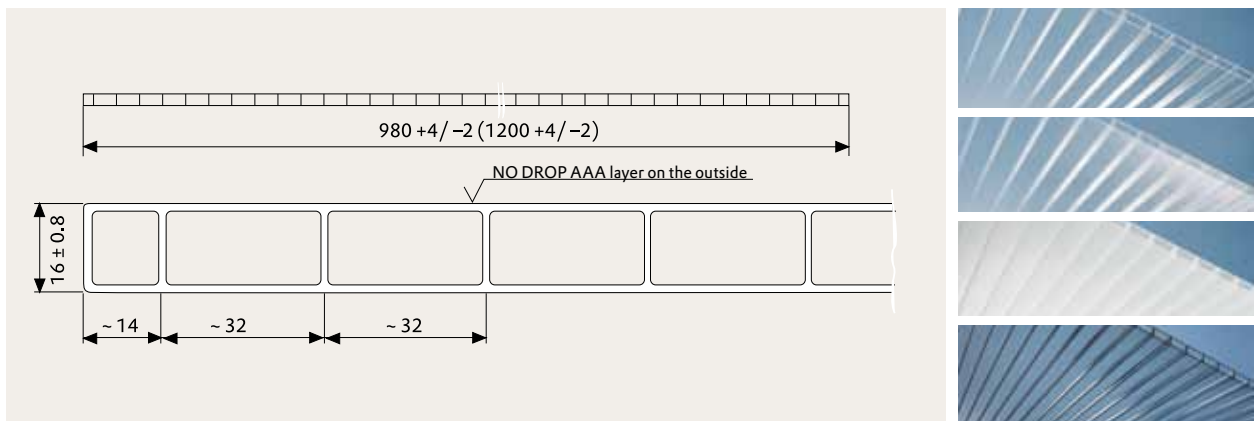
# PLEXIGLAS RESIST® AAA

## SDP 16/980(1200)-32

### Product Description

**New!**  
**Now with**  
**AntiAlgaeApplication!**

## Technical Information



Section of PLEXIGLAS RESIST® AAA SDP 16 (dimensions in mm)

### Product and Benefits

PLEXIGLAS RESIST®) AAA SDP 16 is a double-skin sheet of impact-modified acrylic (polymethyl methacrylate, or PMMA). It is highly light-transmitting and durably weather-resistant, and inhibits algae growth.

### PLEXIGLAS RESIST® AAA SDP 16 is suitable for

- patio roofs
- conservatories
- carports
- flat or curved skylights
- porch roofs
- façades
- balconies
- etc.
- greenhouses

### Advantages of PLEXIGLAS RESIST® AAA SDP 16

- reduces, among other things, the growth of algae and mosses on the sheet surface
- can significantly reduce cleaning cost
- is coated with a completely non-toxic and biologically neutral AntiAlgaeApplication
- is extraordinarily UV-resistant and comes with a 30-year guarantee against yellowing\*\*)
- offers excellent protection against excessive amounts of harmful UV radiation
- is safe and easy to handle
- helps save energy and minimize CO<sub>2</sub> emissions
- is hail-resistant, with a 10-year guarantee for withstanding hailstones with an energy of 1 joule
- is available in a range of colors.



The sheet is protected from UV radiation by Naturally UV-Stable technology.



### AntiAlgaeApplication (AAA)

The AAA coating, based on advanced nanotechnology, is a further development of the successful NO DROP<sup>\*\*\*)</sup> coating, which has proven its worth over many years. It is directly applied to the sheet in an additional process during production. Due to the coating, algae, mosses, pollen, and other forms of soiling lose the ability to adhere to the sheet, and may even be immediately and completely decomposed, by the action of natural UV radiation from the sun. In combination with the well-known NO DROP effect, the next rainfall can almost completely rinse away the residues of the decomposed soiling.

### Activation of the AntiAlgaeApplication

The new NO DROP AAA coating is covered by a protective layer. This is washed away by condensation or rain water, thus activating the NO DROP AAA coating. Alternatively, the coating may be activated manually by sponging or hosing down with water.

### Efficacy and Care Instructions

The NO DROP AAA coating works in conjunction with the sun's natural UV radiation. To allow as much UV light as possible to reach the sheet surface unhindered so as to obtain the maximum possible efficacy, we recommend cleaning the PLEXIGLAS® roofing once a year in accordance with our care instructions. Under especially unfavorable climatic conditions, algae growth may occur despite the AAA coating, but will be significantly reduced.

\*) European Patent 733 754

\*\*) Applies for clear PLEXIGLAS® multi-skin sheeting as in the guarantee declaration

\*\*\*) European Patent 149 182

## Technical Data (Typical Values)

Available lengths	2,000 to 7,000 mm	
Light transmittance $\tau_{D65}$	Clear 0RS22 NO DROP AAA	ca 86%
	Clear 0RS22 C NO DROP AAA	ca 85%
	White WRS22 NO DROP AAA	ca 74%
	Grey 7RS22 NO DROP AAA	ca 45%
Total energy transmittance g	Clear 0RS22 NO DROP AAA	ca 82%
	Clear 0RS22 C NO DROP AAA	ca 81%
	White WRS22 NO DROP AAA	ca 73%
	Grey 7RS22 NO DROP AAA	ca 60%
Heat transfer coefficient k	2.5 W/m <sup>2</sup> K	
Coefficient of linear thermal expansion $\alpha$	0.09 mm/m °C	
Possible expansion due to heat and moisture	ca 6 mm/m	
Max. permanent service temperature without load	70 °C	
Weighted sound reduction index (estimated)	ca 24 dB	
Minimum permissible cold-curving radius	2,400 mm (150 × sheet thickness)	

## Fire Behavior

- The fire behavior of PLEXIGLAS® is rated as European Class E according to DIN EN 13501.
- PLEXIGLAS® burns almost entirely without smoke according to DIN 4102 and is easily extinguished.
- The smoke gases produced by PLEXIGLAS® are neither acutely toxic according to DIN 53436 nor corrosive according to DIN VDE 0482-267.
- Roof surfaces glazed with PLEXIGLAS® open up by melting in the event of fire, allowing smoke and heat to escape.

## Guarantee

The guarantee conditions for this and other products are available at [www.plexiglas.net](http://www.plexiglas.net).

## Loadbearing capacity

### Support spacing

For loads of up to 1,000 N/m<sup>2</sup>, PLEXIGLAS RESIST® AAA SDP 16/980 double-skin sheet supported evenly on all four sides requires no additional cross-members. For higher loads, or a sheeting width of 1,200 mm, the spacings shown in the table apply. The loadbearing capacity of PLEXIGLAS RESIST® AAA SDP 16 is determined in accordance with ETAG 010 (the European Technical Approval Guidelines for self-supporting translucent roof kits), with a clamping depth of 20 mm being assumed for the sheet in the glazing system. For lower clamping depths the spacing of the supports is to be reduced accordingly.

Load [N/m <sup>2</sup> ]	Support spacing [m]	
	980 mm	1,200 mm
750	No cross-members	No cross-members
1000	No cross-members	4.0
1250	4.2	3.1
1500	3.4	2.8
1750	3.1	2.6
2000	2.9	2.5
2250	2.7	2.4
2500	2.5	2.2
2750	2.4	2.1
3000	2.3	2.0

® = registered trademark

PLEXIGLAS and PLEXIGLAS RESIST are registered trademarks of Evonik Röhm GmbH, Darmstadt, Germany.

Evonik Röhm GmbH is certified to DIN EN ISO 9001 for quality management and to DIN EN ISO 14001 for environmental management.

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Ref. no. 234-16, December 2009  
xx/1209/09763 (en)



**EVONIK**  
INDUSTRIES

**Evonik Röhm GmbH**  
Business Unit  
Performance Polymers  
Kirschenallee  
64293 Darmstadt  
Germany  
[info@plexiglas.net](mailto:info@plexiglas.net)  
[www.plexiglas.net](http://www.plexiglas.net)  
[www.evonik.com](http://www.evonik.com)