



## **PLEXIGLAS®** Applications



#### **Aquariums**

As an extremely large monolithic acrylic sheet, PLEXIGLAS® is the ideal material for aquarium construction. Flat sheets offer:

- a clear, distortion-free view in authentic colors,
- ease of installation and care,
- extremely high component stability and break resistance,
- easy bonding of various structural components,
- freedom from condensation due to good heat

Curved sheets are easy to fabricate owing to their very good thermoformability, and offer wide creative scope.



#### **Glazing of Pressure Equipment**

PLEXIGLAS® is the first choice when it comes to withstanding ist high pressure. The arguments in its favor are the material's clear, distortion-free view, homogenous, monolithic character, and, most importantly, its certification by the appropriate bodies, e.g. Germanischer Lloyd or PVHO (USA).



#### **Light and Water Architecture**

PLEXIGLAS® is a beautiful material for artistic structures, with:

- colored blocks in transparent, translucent or fluorescent grades,
- absolute colorlessness that lets the unique character of water and light shine through,
- oundless potential for creative designs.



### **Technical Applications**

Protective glazing, milled parts, lenses -PLEXIGLAS® enables vieles all these and many more, thanks to its

- special optical properties,
- high resistance to solvents and chemicals,
- resistance to ballistic impact,
- great ease of machining and thermoforming.



## **Protective Glazing of Animal Enclosures**

PLEXIGLAS® protects animals and visitors alike, and affords a clear view from both sides. It is the ideal material for transparent barriers around animal enclosures in zoos and wildlife parks, due to

- excellent permanent service properties
- and enormous break resistance.



#### Art and Decoration

PLEXIGLAS® is also suitable for adding intriguing touches and awakening interest. Its

- brilliance, lighting effects,
- variety of colors
- and easy machining and fabrication invite artists and designers to make creative use of the material.









PLEXIGLAS® Certificates

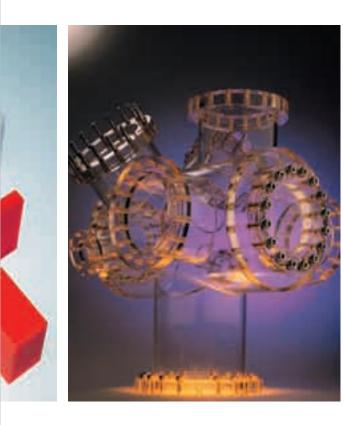
We offer you maximum safety for our original PLEXIGLAS® block products.

In response to market requirements and in order to extend applications for PLEXIGLAS® blocks for extreme loads (e.g. pressure chambers, underwater applications), we provide PLEXIGLAS® GS blocks of examined quality with the corresponding certificates.

These certificates cover the following regulations and fields of application:

- European Pressure Equipment Directive
- Rules for Classification and Construction III Offshore Technology (Underwater Technology, Diving Systems) of Germanischer Lloyd
- SAFETY STANDARD FOR PRESSURE VESSELS FOR HUMAN OCCUPANCY ASME PVHO-1-2002

We will be pleased to furnish further information for specific projects.





## **PLEXIGLAS®** Specialties

In addition to the grades listed in the sales range, a series of specialties is available with very special properties:

PLEXIGLAS® blocks can also be manufactured in colored grades. This offers almost unlimited choice to architects, interior designers, furniture manufacturers and creative professionals in the arts or in advertising.

PLEXIGLAS® blocks can be provided in all transparent, translucent and opaque variants according to the extensive range of colors for PLEXIGLAS® sheets.

The standard production size is 3000 x 2000 mm. Thicknesses up to 100 mm can be manufactured. Larger sizes and thicknesses are available on request.

- Clear and colored PLEXIGLAS® blocks can be manufactured with one or two satin surfaces in size 3000 x 2000 mm.
- PLEXIGLAS® blocks are also available with increased resistance to solvents and chemicals.
- We also provide UV-transmitting PLEXIGLAS® blocks, as well as
- blocks for special optical requirements.

# **PLEXIGLAS®** Range Specialty Glazings

	Sizes [mm]							
PLEXIGLAS® GS Clear 0Z00 / 0F00	Thickness 30 mm	•	•	•	•	•	•	•
	40 mm	•	•	•	•	•	•	•
	50 mm	•	•	•	•	•	•	•
	60 mm	•	•	•	•	•	•	•
	70 mm	•	•		•	•	•	•
	80 mm	•	•		•	•	•	•
PLEXIGLAS® GS Clear 0F00	90 mm	•	•		•	•	•	•
	100 mm	•	•		•	•	•	•
	110 mm	•	•		•	•	•	•
	120 mm	•	•		•	•	•	•
	140 mm	•	•		•	•	•	•
	160 mm	•	•		•			
	200 mm	•	•		•			

For many existing and potential fields of application, there is one material – PLEXIGLAS®.

Hardly any other material lends itself so easily to so many uses, while providing such outstanding properties as

- high transparency and brilliance
- break resistance and compressive strength
- weather resistance.

No wonder PLEXIGLAS® convinces users particularly when it comes to specialty glazings.

- Standard
- Manufactured to order

At thicknesses of more than 120 mm, the sizes are slightly smaller due to the production process.

Larger and colored blocks are available on request.

® = registered trademark

PLEXIGLAS is a registered trademark of Evonik Röhm GmbH, Darmstadt, Germany.

Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment).

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Performance Polymers Business Unit

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Evonik, Power to create,