

*Meets the highest demands -
first choice for tableware!*

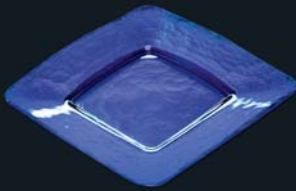
HYDROGLASUR: The economic alternative for the production of coloured glass items with an unlimited variety of colours and effects. From highly transparent to completely hiding, from brilliant to mat, only your imagination defines the limits. Of course free of heavy metals and easy in application, Hydroglasur is the modern technical solution for coloured glass tableware.

Hydroglasur is a water borne coating system for the coloured decoration of glass surfaces in the interior. Due to its properties it's especially suited for the coating of household glassware such as drinking glasses, plates, or bowls that are cleaned in the dishwasher regularly. Objects coated with Hydroglasur are hard to distinguish from pigmented or etched glass.

Hydroglasur opens new possibilities in the design of glass objects and is the first choice wherever the design of glass objects has to meet exceptional requirements and where high durability as well as an economical production play a decisive role.

A broad application window has been given great importance in the development of Hydroglasur. Thus, application is easy and economical with a wide range of machinery parameters.





PRODUCT VERSIONS AND COLOURS

Hydroglasur is available in the following product versions:

HYDROGLASUR BG/S

highly brilliant
transparent, opaque, or hiding

HYDROGLASUR MG/S

mat
similar to an etched surface,
transparent to hiding

Hydroglasur BG/S and MG/S are available in an assortment of basic colours that enables our customers to mix any desired colour shade. Special colours according to the customer's specification, e.g. from the common colour charts or sample items can be produced short-term.

All basic colours of BG/S and MG/S are mixable in any ratio. This allows on one hand the production of a nearly unlimited variety of colour shades, on the other hand it permits finishes with smooth transitions from one colour to another.

Beside the basic colours you can choose from a multitude of effect coatings like metallic colours, gold, silver, copper, neon colours or pearl effects. Effect coatings may show reduced durability. Please conduct tests.

PROPERTIES

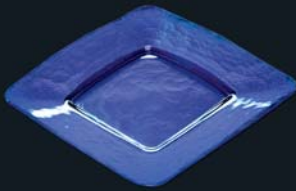
Hydroglasur BG/S and MG/S are superior organic one-pack water borne coatings with outstanding properties:

- Good adhesion to glass
- Hard, viscoplastic surface with excellent mechanical characteristics
- The basic colours of our product line Hydroglasur show preeminent light fastness (indoor).
- Outstanding dishwasher durability of more than 500 cycles, depending on the colour even more than 1,000 cycles in the household dishwasher
- Good resistance against chemicals according to DIN ISO 2836, good solvent resistance, good resistance against alkalis and acids
- The coatings are free of heavy metals und other toxic substances and comply with the requirements of DIN EN 71 part 3 regarding the migration behaviour. The requirements of IKEA (IOS-PRG-0021 2.2 Glassware) for household glass without direct contact to food are being complied.
- Hydroglasur has not been tested for long-term contact with food. Thus it should only be used for surfaces that are not in direct contact to food. Typical applications are the exterior coating of glasses or bowls as well as the finishing of the bottom side of plates.



TECHNICAL REQUIREMENTS AND APPLICATION GUIDELINES

STORAGE AND SHELF LIFE:	Hydroglasur should be stored in original containers between +5°C and +25°C. Appropriate storing provided, shelf life is minimum six months.
VISCOSITIES:	Hydroglasur is usually delivered ready-to-use; for further information please consult the technical information sheet.
SUBSTRATE:	The precondition for proper finishing results is a clean glass surface, i.e. free from fat, dust, finger prints, or slip agents (end coating).
THINNING / CLEANING:	Demineralized (deionised, distilled, fully desalted) water
NOZZLE SIZE:	manual spray gun: 0.8 to 1.5 mm or automatic application: 0.5 to 1.0 mm For effect coatings please consult technical information sheet.
PRESSURE:	approx. 3 to 4 bar (atomisation)
PAINT PRESSURE:	max. 1 bar, usually 0.6 bar
RECOMMENDED FILM THICKNESS:	18 to 25 µm dry film
<p>During application the object as well as paint and spraying equipment must have a temperature of min. 15°C. It is possible to varnish pre-heated pieces – for proper flow the pieces should not be heated above 40°C though. Warm surfaces speed up evaporation and thus result in thicker layers.</p>	
CURING CONDITIONS:	<p>Hydroglasur cures in a temperature range of 160 to 190°C, e.g.</p> <p>15 Min. at 170°C object temperature 8 Min. at 190°C object temperature</p> <p>A pre-drying at 30 to 80°C for 8 to 10 Min. is recommended to prevent the formation of blisters. No post curing at room temperature. In case of insufficient crosslinking, proper curing can only be accomplished by reheating to temperatures above 160°C.</p>
<p>Please consider that the heat-up time may vary significantly depending on wall thickness. We recommend checking the degree of curing by the following test: the coating must not soften after 16 to 24 hours storage in cold water. If softening occurs, the curing is not completed and additional baking is required.</p>	
SAFETY INFORMATION:	<p>Hydroglasur is not a dangerous material with respect to the German chemical regulations as well as the corresponding EU rules. This product, therefore, does not require any special labelling. It is not classified dangerous transport material.</p> <p>Please consult the safety data sheet for Hydroglasur. It contains information for the handling, product safety and the industrial hygiene of this product.</p>



HYDROGLASUR

GLASS COATINGS

DESIGN EXAMPLES:

These are only a few examples of the multitude of application and design options with Hydroglasur:



Note! The information submitted in this publication is based on our current knowledge and experience. The provided information does not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislations are observed.