

## *Highest process reliability and optimal durability!*

**HYDROCONT:** the economical solution for the decoration of glass packagings such as perfume or beverage bottles. Its excellent resistance against a vast number of fillings in combination with its very good mechanical properties produces coatings that not only comply with the aesthetic demands of your customers, but also meet the technical requirements for an economical operation on fast-moving filling lines.

Highly transparent and brilliant or mat and opaque, coatings made with Hydrocont are hardly distinguishable from pigmented glass, but without the limitation in the colour range and naturally free of heavy metals.

A wide application window has been given great importance in the development of Hydrocont. So, even complicatedly shaped perfume bottles can be coated trouble-free with Hydrocont. Conventionally or by means of electrostatics, finishing with Hydrocont is easy and economical. The one-pack water borne coating is cured at 150°C to 180°C and offers a high process reliability.





## PRODUCT VERSIONS AND COLOURS

Hydrocont is available in the following product versions:

**HYDROCONT GL517**

highly brilliant  
parent, opaque, or hiding

**HYDROCONT GLM517**

mat  
similar to an etched surface, transparent to hiding

Hydrocont GL517 and GLM517 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 GL517 and GLM517 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

Hydrocont GL517 and GLM517 are high-class organic one-pack water borne coatings with outstanding properties:

- Very good adhesion to glass
- Hard, viscoplastic surface with excellent mechanical characteristics
- The basic colours of our product line Hydrocont show preeminent light fastness (indoor).
- The coatings are long-term temperature resistant up to 120°C.
- Hydrocont GL517 and GLM517 can be applied with electrostatic automatic coating lines suited for water borne coatings.
- 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.



## TECHNICAL REQUIREMENTS AND APPLICATION GUIDELINES

STORAGE AND SHELF LIFE:	Hydrocont should be stored in original containers between +5°C and +25°C. Appropriate storing provided, shelf life is minimum six months.									
VISCOSITIES:	Hydrocont 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>Hydrocont cures in a temperature range of 150 to 190°C, e.g.</p> <table border="0"> <tr> <td>30 Min.</td> <td> </td> <td>at 150°C object temperature</td> </tr> <tr> <td>15 Min.</td> <td> </td> <td>at 170°C object temperature</td> </tr> <tr> <td>8 Min.</td> <td> </td> <td>at 190°C object temperature</td> </tr> </table> <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>	30 Min.		at 150°C object temperature	15 Min.		at 170°C object temperature	8 Min.		at 190°C object temperature
30 Min.		at 150°C object temperature								
15 Min.		at 170°C object temperature								
8 Min.		at 190°C object temperature								
<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>Hydrocont 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 Hydrocont. It contains information for the handling, product safety and the industrial hygiene of this product.</p>									



## DESIGN EXAMPLES:

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



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.