



Bayhydrol[®] UV XP 2775

Characterization

Urethane Acrylate Dispersion; solvent free.

Bayhydrol[®] UV XP 2775 is used for the formulation of waterborne UV clear or pigmented wood and plastic coatings, in particular for highly pigmented wood coatings.

Form supplied

Approx. 40.5 % solid content in water

Characteristic data*

Property	Value	Unit of measurement	Method
Non-volatile content (1g / 1h / 125 °C, convection oven)	39 - 41	% by wt.	DIN EN ISO 3251
Viscosity at 23 °C	< 300	mPa·s	DIN EN ISO 3219/A.3
pH	approx. 7.5 - 9.5		DIN ISO 976

*These values are provisional. Binding supply specifications will not be available until the final product data sheet is published.

Other data**

Property	Value	Unit of measurement	Method
Appearance	Milky, slightly colloidal		

**These values provide general information.

Notice

No statistically verified datasets of the characteristic data and other data listed are currently available. Additional adjustments are possible as a result of further process optimization, such as scale-up trials to larger production units.





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Solubility / thinnability

Bayhydrol[®] UV XP 2775 can be thinned with water.

Compatibility

The dispersion can only be formulated and applied at pH > 7.0. It is recommended to adjust the pH with AMP 90 or triethylamine.

The combination with other types of dispersions is possible. Effects should be evaluated on a case-by-case basis. Addition of appropriate solvent as an additive is in principal unproblematic.

Properties / Applications

Bayhydrol[®] UV XP 2775 is used for the formulation of high quality waterborne UV coatings for furniture. Depending on the formulation and the method of application, it is possible to produce finished surfaces that conform to the resistance requirements of DIN 68861, 1B.

Bayhydrol[®] UV XP 2775 is especially usable for white pigmented coatings with high pigment content and resistance properties. After evaporation of water, the coating is physically dry and tack-free.

UV-Curing conditions:

Clear coat : 5 m/min. per 80 W Hg lamp

Pigmented Coating: 3 m/min. per 80 W Ga + Hg lamp

The addition of 1 to 2 % photoinitiator calculated on the solid binder have proven suitable for initiating the curing reaction.

Viscosity can be adjusted by the addition of appropriate thickeners.

Before adding matting agents the pH should be adjusted above 7.5 with AMP 90.

The product can also be combined with Bayhydur[®] hardener to enhance the final properties ("dual cure ").





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Storage

- Storage in original sealed Covestro container.
- Recommended storage temperature: 10 - 30 °C.
- Protect from frost, heat and foreign material.

General information: The product is sensitive to frost. Freezing will damage the product irreversibly. Prolonged storage at higher temperatures may result in a change in the average particle size, risk of sedimentation, risk of pH-drift and ultimately coagulation. Contamination with certain bacteria, fungi or algae may render the product unusable.

Storage time

Covestro represents that, for a period of six months following the day of shipment as stated in the respective transport documents, the product will meet the specifications or values set forth in section "specifications or characteristic data" above, what ever is applicable, provided that the product is stored in full compliance with the storage conditions set forth in and referenced under section "storage" above and is otherwise handled appropriately.

The lapse of the six months period does not necessarily mean that the product no longer meets specifications or the set values. However, prior to using said product, Covestro recommends to test such a product if it still meets the specifications or the set values. Covestro does not make any representation regarding the product after the lapse of the six months period and Covestro shall not be responsible or liable in any way for the product failing to meet specifications or the set values after the lapse of the six months period.



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Labeling and statutory requirements This product data sheet is only valid in conjunction with the latest edition of the corresponding Safety Data Sheet. Any updating of safety-relevant information – in accordance with statutory requirements – will only be reflected in the Safety Data Sheet, copies of which will be revised and distributed. Information relating to the current classification and labeling, applications and processing methods and further data relevant to safety can be found in the currently **valid Safety Data Sheet**.

Important

This is a Trial Product of which we do not yet have extensive experience. No guarantee can therefore be given regarding the behaviour of the product during processing or use.

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance, information and recommendations to determine to your own satisfaction whether our products, technical assistance and information are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by Covestro. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

This product is not designated for the manufacture of a medical device or of intermediate products for medical devices¹⁾. [This product is also not designated for other specifically regulated applications (e.g. including cosmetics, plant protection, fertilisers, plant strengtheners, food processing, food contact and others). If the intended use of the product is for the manufacture of a medical device or of intermediate products for medical devices or for other specifically regulated applications Covestro must be contacted in advance to provide its agreement to sell such product for such purpose.] Nonetheless, any determination as to whether a product is appropriate for use in a medical device or intermediate products for medical devices, for Food Contact products or cosmetic applications must be made solely by the purchaser of the product without relying upon any representations by Covestro.

1) Please see the "Guidance on Use of Covestro Products in a Medical Application" document.

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