Bayhydrol® UH 2621

Type	Aliphatic polyurethane resin dispersion
Form supplied	Approx. 40 % in water, neutralized with N-ethyldiiso-propylamine, approx. 59.0 : 1.0
Uses	Binder for waterborne, highly stone-chip-resistant coatings such as automotive fillers which dry at low temperatures or stone chip functional coatings as well as for water-reducible basecoats for two-coat automotive coatings, coatings for plastics, automotive refinish coatings and industrial coatings.

Specification

Property	Value	Unit of measurement	Method
Non-volatile content (1 g/1 h/125 °C)	39 - 41	%	DIN EN ISO 3251
Efflux time at 23 °C 4 mm cup	10 - 30	s	AFAM 2008/10503
pH	6,5 - 8,5		DIN ISO 976

Other data*

Property	Value	Unit of measurement	Method
Density at 20 °C (supply form)	approx. 1.05	g/ml	DIN EN ISO 2811
Minimum film forming temperature (MFT)	13	°C	DIN ISO 2115 (1 h)

*These values provide general information and are not part of the product specification.

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Compatibility

Bayhydrol® UH 2621 can be used as a combination binder with other water-reducible resins.
It is compatible with e.g. acrylic dispersions, other polyurethane dispersions and water-reducible polyesters, such as Bayhydrol® E 270. It is also compatible with crosslinkers such as amino resins and water-reducible Bayhydur® and Bayhydur® BL grades.
Given the many resins available on the market, compatibility testing is recommended.

Properties / Applications

When used in two-layer systems with TSA and two-component polyurethane clearcoats, metallic basecoats formulated with Bayhydrol® UH 2621 are characterized by even, cloud-free films with a very good metallic effect, excellent gloss and good water resistance. Because it adheres to OEM finishes without prior sanding, the metallic basecoat can also be used for online repair (45 min at 80 °C).
The metallic basecoat films can be oversprayed with a TSA or two-component polyurethane clearcoat after pre-drying e.g. for 5 min at an oven temperature of 80 °C or for 15 min at room temperature.
Baking parameters are a function of the reactivity of the clearcoat. Bayhydrol® UH 2621 is also suitable as a binder for coatings that are highly resistant to stone chipping, such as automotive fillers that dry at low temperatures or stone chip functional coatings. Films with Bayhydrol® UH 2621 are highly flexible and characterized by rapid drying, good topcoat optical performance and good water resistance.

Baking cycle

Bayhydrol® UH 2621 dries sufficiently at room temperature. Drying can also be accelerated within a time-temperature range of e.g. 10 min 60 °C – 2 h 180 °C.

Cleaning

After use, formulation and application equipment should be cleaned immediately or left to soak in water.
Warm water, alkaline cleaning agents alkaline isopropyl alcohol or, if necessary, a mixture of water and butyl glycol are suitable for cleaning.

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Storage	**-** Storage in original sealed Bayer MaterialScience containers. **-** Recommended storage temperature: 5 - 23 °C. **-** Protect from moisture, heat and foreign material.
Storage time	Bayer MaterialScience represents that, for a period of three 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 three months period does not necessarily mean that the product no longer meets specifications or the set values. However, prior to using said product, Bayer MaterialScience recommends to test such a product if it still meets the specifications or the set values. Bayer MaterialScience does not make any representation regarding the product after the lapse of the three months period and Bayer MaterialScience 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 three months period.
Safety	**Hazards identification** Not classified as a hazardous product as per Council Directive 2006/121/EC or 1999/45/EC. **The safety data sheet should be observed.** This contains information on labeling, transport and storage as well as on handling, product safety and ecology.

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