



# Desmophen<sup>®</sup> A 450 BA

Type	Hydroxyl-bearing polyacrylate
Form supplied	approx. 50 % in butyl acetate
Uses	As the polyol component in the formulation of fast-drying two-component polyurethane coatings.

Specification Property	Value	Unit of measurement	Method
Hazen color value	$\leq 50$		DIN EN 1557
Acid value	$4 \pm 2$	mg KOH/g	DIN EN ISO 2114
Viscosity at 23 °C	$4000 \pm 1000$	mPa·s	DIN EN ISO 3219/A.3
Non-volatile content (1 g resin/1 ml TKP*/1 h 105 °C) Disflamoll <sup>®</sup> TKP (tricresyl phosphate)	$50 \pm 2$	%	DIN EN ISO 3251
Hydroxyl content	$1.0 \pm 0.2$	%	DIN 53 240/2
Water content	$\leq 0.1$	%	DIN 51 777/1

Other data* Property	Value	Unit of measurement	Method
Equivalent weight	approx. 1700		
Density at 20 °C	approx. 1.01	g/ml	DIN EN ISO 2811-2
Flash point	approx. 25	°C	DIN EN ISO 1523

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



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## Solubility / thinnability

Desmophen A 450 BA can be thinned to a solids content of approx. 20 % using esters, ketones and ether esters. However, the solutions formed must be tested for their storage stability. Toluene and xylene are suitable for use as diluents.

Only PU grade solvents should be used (< 0.05 % water). They should contain no other reactive impurities.

## Compatibility

Generally speaking, Desmophen A 450 BA is miscible with the Desmodur<sup>®</sup> grades listed. However, the combinations must be tested for their compatibility. Desmophen A 450 BA can be mixed with Desmodur HL\*, IL, L, N 75, N 3390 and Z 4470. It is also compatible with certain nitrocellulose chips, various vinyl copolymers and other Desmophen A grades.

Desmophen A 450 BA has only limited compatibility with other Desmophen grades.

\*With increasing age of the polyisocyanate, incompatibility may develop between Desmophen A 450 BA and Desmodur HL.

## Properties / Applications

Desmophen A 450 BA is suitable for combination with Desmodur N 75 or N 3390 to formulate fast-drying two-component polyurethane coatings, e.g. for industrial furniture finishing. It can also be combined with other Desmophen A grades to formulate primer surfacers and fast-drying automotive and industrial coatings.

With Desmodur HL as the co-reactant, Desmophen A 450 BA yields extremely fast-drying coatings which are soon dry enough to sand and stack.

## Storage

When stored in sealed containers at temperatures not exceeding 30 °C, the product will remain stable for at least 6 months.



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## Safety

### Hazards identification

Flammable. May cause sensitization by skin contact. Repeated exposure may cause skin dryness or cracking. Vapors may cause drowsiness and dizziness.

The safety data sheet (031635) should be observed. This contains information on labeling, transport and storage as well as on handling, product safety and ecology.

This Information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery. This does not apply to Trial-Products.

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