Basonol® PU 1035 W

General	Flexible OH- functional aliphatic polyurethane dispersion developed for primer applications
Key features & benefits	excellent adhesion on various substrates (plastic, e-coat, metal) for 1K stoving coatings crosslinked with melamine and/or blocked polyisocyanate for 2K PUR applications crosslinked with polyisocyanates very flexible formulation robustness hydrolysis stable
Chemical nature	hydroxy functional PES-PUD zero add-on of NMP (N-methylpyrrolidone), NEP (Nethylpyrrolidone) and other organic solvents zero add-on of APEO (Alkylphenolethoxylaten) and metal organic catalysts

Properties

Appearance: translucent emulsion

Typical characteristics
(should not be interpreted as specifications)

solid by weight	~ 43 %
viscosity at 25°C (Brookfield)	~ 35 mPa.s
pH	6-8
density (as supplied)	~ 1.06 g/cm³
glass transition temperature Tg (DSC)	< -30 °C
minimum filming-forming temperature (MFFT)	< 0 °C
hydroxyl content (on solids)	~ 1.1%
hydroxyl number (on solids)	~ 35 mg KOH/g
stabilization	anionic

Application

Basonol® PU 1035 W is used in 1K stoving and 2K primer applications for plastic and metal substrates.

Formulation guideline

Recommendation cross-linker

Melanmine resins:

e.g. Luwipal® 072,073 LF or Luwipal® 066 ULF

polyisocyanates for 2K:

e.g. Basonat® HW 1180 PC

Dispersing agents

Dispex® Ultra FA 4483, Dispex® AA 4140

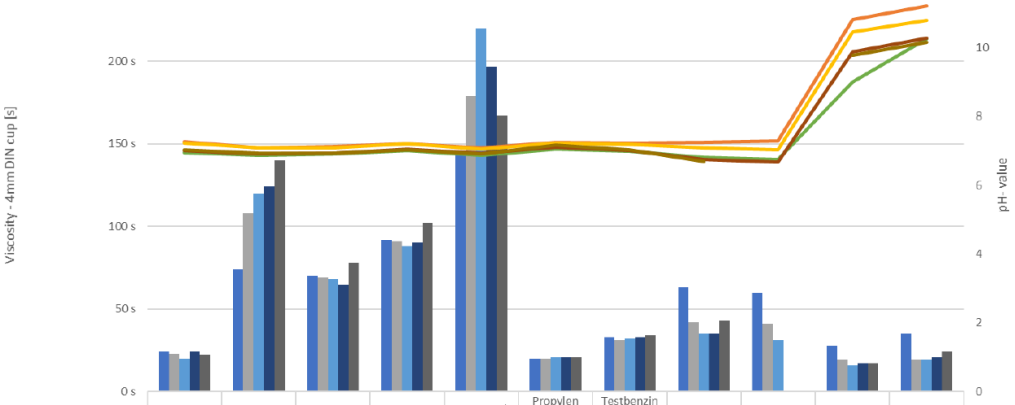
Defoamers

FoamStar® ST 2400, FoamStar® ST 2454

Rheology modifiers

Rheovis® AS 1130

Coalescent solvents (5% on dispersion) storage stability @ 40°C (see diagram)



	pur	BG	BDG	DPnB	n-Butanol	Propylen glykol	Testbenzin 155-185	BGA	BDGA	DMEA	AMP-90
Viskositiy - Start	24 s	74 s	70 s	92 s	145 s	20 s	33 s	63 s	60 s	28 s	35 s
Viskositiy - 1. week	23 s	108 s	69 s	91 s	179 s	20 s	31 s	42 s	41 s	19 s	19 s
Viskositiy - 2. week	20 s	120 s	68 s	88 s	220 s	21 s	32 s	35 s	31 s	16 s	19 s
Viskositiy - 3. week	24 s	124 s	65 s	90 s	197 s	21 s	33 s	35 s	0 s	17 s	21 s
Viskositiy - 4. week	22 s	140 s	78 s	102 s	167 s	21 s	34 s	43 s	0 s	17 s	24 s
pH-Wert - Start	7,3	7,1	7,1	7,2	7,1	7,2	7,2	7,3	7,3	10,8	11,2
pH-Wert - 1. week	7,2	7,1	7,1	7,2	7,0	7,2	7,2	7,1	7,0	10,5	10,8
pH-Wert - 2. week	7,0	6,9	6,9	7,0	6,9	7,1	7,0	6,8	6,7	9,0	10,3
pH-Wert - 3. week	7,0	6,9	6,9	7,1	6,9	7,1	7,0	6,8	6,7	9,9	10,3
pH-Wert - 4. week	7,0	6,9	6,9	7,0	6,9	7,2	7,0	6,7		9,8	10,2

Storage

Basonol® PU 1035 W shall be stored in its tightly sealed original packaging at temperatures between 5 °C and 40 °C. This product must be protected from frost.

For further detailed application information please contact our Technical Support Department.

Safety
When handling this product, please comply with the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

Note
The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.

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