



Vorastar* HB 6704 Prepolymer

Description

One component liquid cold applied waterproofing system based on polyurethane. It is specially recommended for application on horizontal surfaces. On application it cures with moisture and forms a seamless elastomeric waterproofing membrane. The coating is not resistant to UV rays and sunlight.

Typical Properties

Units	Vorastar HB 6704 Prepolymer	Test Method
Appearance	Black	DIN 52002
Viscosity	mPa.s	ASTM D 4878-88
Specific Gravity	-	DIN 53217

Recommended Process Conditions

Surface preparation: The substrate to be waterproofed must be dry and free from dust, loose particles, oil and grease. Substrates such as bituminous roofing, asphalt, concrete or steel should be pre-treated suitably. Cracks and surface irregularities need to be filled by sealants and do additional waterproofing. For smooth and stable surfaces, this step can be skipped.

Application: Vorastar HB 6704 prepolymer while designed primarily for horizontal applications, with its self-leveling characteristics may be applied to vertical surfaces with a roller, trowel or suitable spray equipment. However, it will be necessary to make several coats to build up the desired thickness. An application of 60 mils thickness is recommended for horizontal surfaces. The coating is recommended for application for temperatures above 5 deg. C. Once the container is opened it is recommended to be consumed instantly. The product is not recommended for application on dilution with solvent.

Cleaning: Tools and equipment may be cleaned using Acetone, Ethanol or Xylene.

Maintenance: If the membrane is damaged and the bond is intact, cut out damaged area and recoat. No primer is required. If the bond is affected, remove the membrane, clean and prepare in accordance with the instructions under surface preparation.

Recommended Use

Vorastar*HB 6704 prepolymer is ideally suited for the waterproofing of two course concrete slab. The application areas are, parking garages, subways, channels, kitchen, bathrooms, floors, balcony, unexposed roofs, swimming pools, man-made fountains, top plate at plazas, etc.



Handling and Storage

Units	Vorastar HB 6704 Prepolymer	
Storage temperature	°C	15 - 35
Storage stability / Shelf life	month S	6

Material should be stored by sealed pails at dry and well-ventilated places and protected from sun or rain. The temperature in stored places can not be higher than 40° C. It cannot be closed to fire sources.

Typical Polymer Properties

Units	Limits	Test Method
Shore hardness	D	≥50
Theoretical coverage	kg/m ²	1.7 for dft 1mm minimum. Coverage may vary with the substrate condition during application.
Weight Loss	%	≤20
Cure time, 25° C, 50% RH	hours	48
Low temperature crack bridging		No cracking
Film thickness(vertical surface)	mm	1.5 ± 0.1
Adhesion-in-peel after water immersion	N/m	175
Optional test after adhesion in peel	-	No separation at surface
Extensibility after heat aging	mm	6.4 (no cracking)
		ASTM C 1250
		ASTM C 1305
		ASTM C 836
		ASTM C 794
		ASTM C 836
		ASTM C 1522

Safety Considerations

Material Safety Data (MSD) sheets are available from The Dow Chemical Company. MSD sheets are provided to help customers satisfy their own handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations. MSD sheets are updated regularly, therefore, please request and review the most current MSD sheet before handling or using any product. These are available from the nearest Dow sales office.

Customer Notice

Dow encourages its customers to review their application of Dow products from the standpoint of human health and environmental quality. To help ensure that Dow products are not used in ways for which they were not intended or tested, Dow personnel will assist customers in dealing with ecological and product safety considerations. Your Dow sales representative can arrange the proper contacts.

Contact information :
For more information about PU Systems products, call The Dow Chemical Company :
<http://www.dow.com/pusystems/index.htm>

NOTICE: The information and data contained herein do not constitute sales specifications. The product properties may be changed without notice. No liability, warranty or guarantee of product performance is created by this document. It is the Buyer's responsibility to determine whether Dow products are appropriate for Buyer's use and to ensure that Buyer's workplace and disposal practices are in compliance with applicable laws and regulations. No freedom from any patents owned by Dow or other industrial or intellectual property rights is granted or to be inferred.



Quality Management System certified by DQS
against DIN EN ISO 9001
Reg. No. 055759 QM





Dow Construction Chemicals

Cellulose Ethers, Redispersible Latex Powders,
Acrylic Emulsion Polymers, Synthetic Thickeners, Dispersants



Jointly advancing
better building ...

NEW:

WALOCEL™ Xact
for high-quality Cement Based
Tile Adhesives

WALOCEL™ Xtra portfolio
specially developed for Gypsum
Spray Plaster



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NEW:
WALOCEL™ Xtra
portfolio

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NEW:
WALOCEL™ Xact
portfolio



Welcome to Dow Construction Chemicals

High Performance Products and Solutions for the Construction Industry

The construction industry in Europe, Middle East and Africa is changing. Demand for high-performance, cost effective and environmentally advanced building products continues to increase as the sector adapts to meet the challenges of energy efficiency, economic constraints and demand for structures equipped for 21st century living.

Dow Construction Chemicals has evolved to address those needs with a broad product portfolio based on acrylic emulsion polymers, redispersible latex powder, and cellulosic technology.

Dow Construction Chemicals brings together the combined expertise and high research and development competence based on 40-years of industry experience. We offer in-depth application knowhow as well as effective formulation support to manufacturers of building and construction products around the world – a strong construction-focused business unit supported by global research, technical service and manufacturing facilities.

Where quality building starts

The highly reliable quality of binders and products from Dow Construction Chemicals form the heart of many innovative products and systems that have since become industry essentials.

With a portfolio of established brands such as WALOCEL™ cellulose ethers, DOW™ Latex Powders, PRIMAL™ and UCAR™ acrylic emulsion polymers and AQUASET™ acrylic thermosetting resins Dow is a leading supplier to customers manufacturing building and construction products around the world.

Regardless of whether your customers are looking for improved workability features or demand an especially durable, high-quality end-product – we help you meet their expectations. Our experts support you in optimising formulations in order to keep key properties of your end products stable and as specified – this is where quality building starts.

Your online resource for the latest product data, technical datasheets, application information, technical articles and news.

The technological building blocks

The Dow Construction Chemicals portfolio is built around three core technological pillars that are essential for the development of building product formulations to meet a wide variety of needs.

Acrylic polymer dispersions and acrylic solution polymers

Customers of Dow Construction Chemicals have access to a heritage of technically advanced, high-quality binders and additives.

The business offers a wide range of emulsion polymers for the manufacture of building and construction products including pure acrylic, styrene acrylic and vinyl acetate polymers for improving the properties of cementitious as well as non-cementitious applications. In addition, dispersants and

synthetic thickeners are available for a variety of applications. Features and benefits offered by our portfolio include strong adhesion, improved water resistance, ease of use, increased durability and more.

Applications range from dispersion based renders through to coatings for cool reflective roofs and roof tiles, and from sealants and adhesives to cementitious waterproofing membranes. High-performance acrylic thermoset binders have also been developed for use in high-performance nonwovens and in glass fibre insulation.

Cellulosic technology

Decades of experience enable Dow Construction Chemicals to offer a portfolio of cellulose-based products for construction materials with distinctive benefits across a wide range of applications.

The range includes well known brands such as WALOCEL™ and METHOCEL™ cellulose ethers which incorporate features such as:

- » rapid development of temperature-stable, high-water retention capabilities
- » selective consistency adjustment for easy workability
- » precise control of rheology for good workability and sag resistance
- » stabilisation of air voids
- » improved substrate adhesion.

Potential applications range from tile adhesives and grouts, to fillers, levellers and joint compounds, and from reinforcing and bonding mortars for ETICS to gypsum plasters and cement-based renders.

Redispersible latex powder

DOW™ Latex Powders are redispersible polymer powders that combine the performance benefits of liquid latex modifiers with the convenience, reliability and handling/storage advantages of one-component dry systems.

They offer a variety of features and benefits for mineral-bound products, including:

- » improved workability
- » excellent adhesive strength on different and demanding surfaces
- » improved open time
- » hydrophobicity (water repellent properties)
- » abrasion resistance.

The powders are used primarily as additives for products such as cement-based tile adhesives, thermal insulation systems and self-levelling flooring compounds.



What you need, where you need it

Tailored support

The range of options offered by Dow Construction Chemicals means products can be tailored to suit a variety of applications and end-use needs. That might mean designing more cost-effective options into an existing range; creating new, environmentally advanced products to help address environmental challenges or creating formulations for a premium performance product for a high-end application.

Thanks to the wide range of expertise and broad portfolio of products based on a proven range of technologies, customers working with Dow Construction Chemicals have access to highly-competent, experienced professionals who will provide support in identifying the appropriate formulation based on the right technology and the right products.

The benefit of global resources

Combining the resources of two entities has resulted in a worldwide network of research and manufacturing capabilities well equipped to meet the demands of today's

businesses. Customers benefit from global innovations and development across all regions, and can at the same time rely on local presence that understands the specific demands of the regional marketplace.

In Europe, Middle East and Africa, Dow Construction Chemicals serves the market with regional laboratories, 13 strategically placed production plants and around 100 dedicated professionals in sales, marketing and R&D.

The team provides access to global knowledge along with on-the-ground support and in-depth market understanding, meaning it is well-equipped to respond to local needs.

In the following you will find an overview on our product range. Please consult your local sales representative to identify the specific product portfolio available in your region.

Gypsum Based Plaster, Machine Applied | Cellulose Ethers

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ MKX 15000 PP 20		15.000	medium
WALOCEL MKX 20000 PP 25		20.000	medium
WALOCEL MKX 25000 PP 20		25.000	medium
WALOCEL MKX 30000 PF 60 E	Functional (rheological), non-ionic cellulose ether, improving water retention – even at high temperature of the wet mortar – and workability	30.000	high
WALOCEL MKX 35000 PP 25		35.000	medium
WALOCEL MKX 35000 PP 35		35.000	medium
WALOCEL MKX 40000 PFV 01		40.000	retarded dissolution
WALOCEL MKX 40000 PF 20		40.000	medium
WALOCEL MKX 40000 PP 30		40.000	medium
New: WALOCEL Xtra portfolio for Gypsum Based Plaster		Characteristics	Viscosity [mPas]*
WALOCEL Xtra 40-01		40.000	no
WALOCEL Xtra 40-30	Functional (rheological), non-ionic cellulose ether, improving water retention – even at high temperature of the wet mortar – and workability	40.000	medium
WALOCEL Xtra 60-01		60.000	no
WALOCEL Xtra 60-30		60.000	medium

* 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C**Gypsum Based Plaster, Hand Applied | Cellulose Ethers**

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ M-20616	Functional, non-ionic cellulose ether with high thickening capability, improving water retention – even at high temperature of the wet mortar	30.000	high
WALOCEL VP-M-58108		55.000	very high

* 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C**Gypsum Based Smoothing Mortar | Cellulose Ethers**

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ M-6636	Functional, non-ionic cellulose ether with balanced set of application characteristics – reducing gypsum lumping	30.000	high

* 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C

Particle Size	Features of End-Product			
	Water Retention	Less Stickiness	Shear Stability	Standing Strength
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★

Particle Size	Controlled Particle Morphology	Features of End-Product			
		Water Retention	Less Stickiness	Shear Stability	Standing Strength
powder, fine	Yes	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	Yes	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	Yes	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	Yes	★★★★★	★★★★★	★★★★★	★★★★★

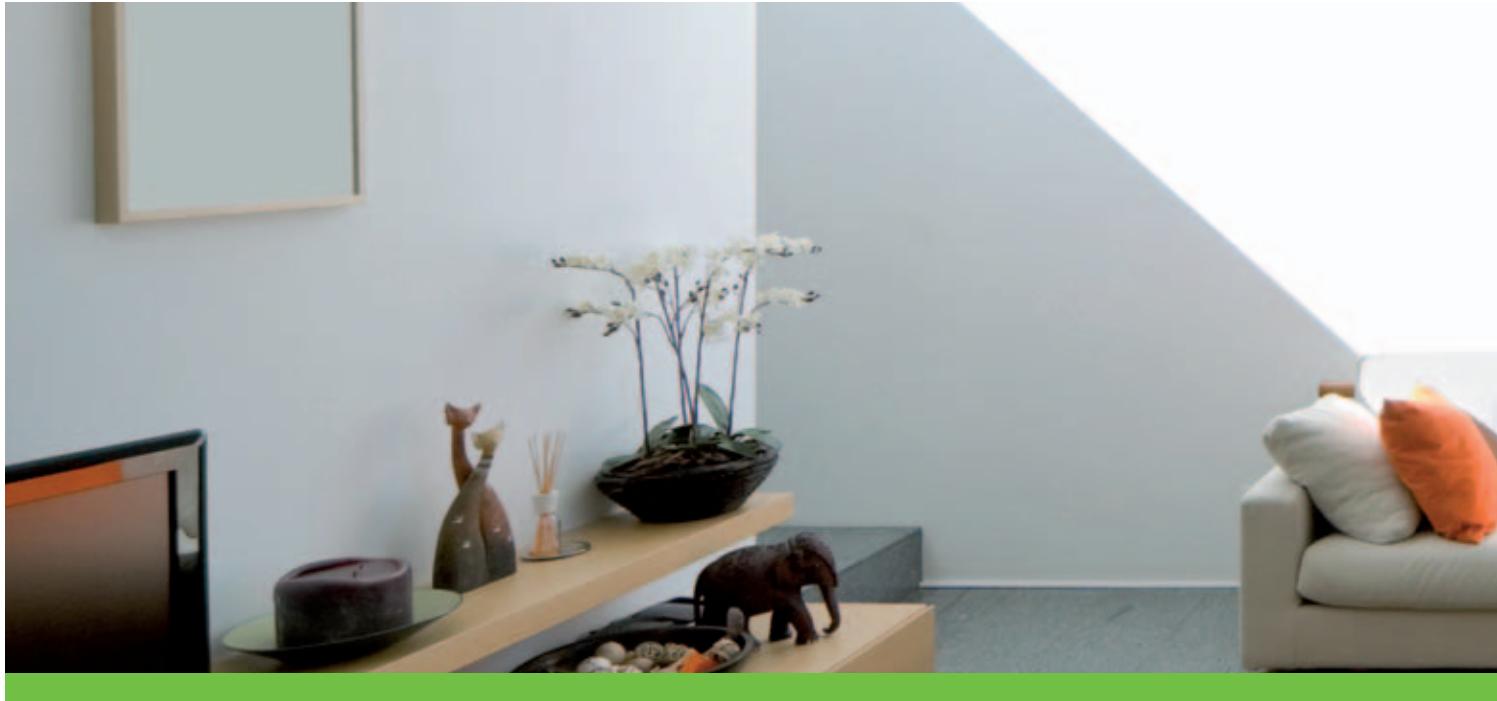
- no ★★★★★ fair ★★★★★ good ★★★★★★ excellent ★★★★★★ outstanding

Particle Size	Features of End-Product			
	Water Retention	Workability	Less Stickiness	Standing Strength
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★

- no ★★★★★ fair ★★★★★ good ★★★★★★ excellent ★★★★★★ outstanding

Particle Size	Features of End-Product			
	Water Retention	Lump Reduction	Consistency Built-Up	Shear Stability
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★

- no ★★★★★ fair ★★★★★ good ★★★★★★ excellent ★★★★★★ outstanding



Gypsum Based Joint Filler | Cellulose Ethers

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ MKX 30000 PF 60 E	Functional, non-ionic cellulose ether, improving water retention with modification for very high standing strength	30.000	very high
WALOCEL M-6636	Functional, non-ionic cellulose ether with balanced set of application characteristics – reducing gypsum lumping	30.000	high

* 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C

Gypsum Based Joint Filler | Redispersible Latex Powders

Product	Characteristics	Composition	MFFT [°C]
DLP 211 (DOW™ Latex Powder)	Polymer binder,	VAE-VeoVa	3
DLP 212 (DOW Latex Powder)	rapidly dispersible in water	VAE-VeoVa	0

Tape Joint Compound | Cellulose Ethers

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ MK 25000 PFV	Functional, non-ionic cellulose ether with balanced set of application characteristics – improving body and texture	25.000	no

* 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C



Particle Size	Features of End-Product				
	Workability	Lump Reduction	Consistency Built-Up		
powder, fine	★★★★★	★★★★☆	★★★★☆		
powder, fine	★★★★★	★★★★★	★★★★★		
– no		★☆☆☆☆ fair	★☆☆☆☆ good	★☆☆☆☆ excellent	★☆☆☆☆ outstanding

Particle Size	Rheology	Flexibility	Properties/Behaviour of End-Product
powder, free-flowing	neutral	medium hard	good surface appearance, no impact on setting
powder, free-flowing	neutral	medium	good surface appearance, no impact on setting

Particle Size	Features of End-Product				
	Consistency	Standing Strength	Open Time		
powder, fine	★★★★★	★★★★☆	★★★★☆		
– no		★☆☆☆☆ fair	★☆☆☆☆ good	★☆☆☆☆ excellent	★☆☆☆☆ outstanding



Cement Based Render | Cellulose Ethers

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ MKX 6000 PF 01	Functional, non-ionic cellulose ether, improving water retention, not modified	6.000	no
WALOCEL MKX 6000 PP 20	Functional, non-ionic cellulose ether, improving water retention, modified for easy workability	6.000	medium
WALOCEL MKX 15000 PF 01	Functional, non-ionic cellulose ether, improving water retention, not modified	15.000	no
WALOCEL MKX 15000 PP 25	Functional, non-ionic cellulose ether, improving water retention, modified for easy workability and standing strength	15.000	medium
WALOCEL MKW 10000 PP 01	Functional, non-ionic cellulose ether, improving water retention, not modified	10.000	no
WALOCEL MKW 15000 PP 30	Functional, non-ionic cellulose ether, improving water retention with modification for very high sag resistance	15.000	medium
WALOCEL MKW 20000 PP 01	Functional, non-ionic cellulose ether, improving water retention, not modified	20.000	no
WALOCEL MKW 20000 PP 20	Functional, non-ionic cellulose ether, improving water retention, modified for easy workability	20.000	low
WALOCEL MKW 20000 PP 30	Functional, non-ionic cellulose ether, improving water retention, modified for easy workability and high standing strength	20.000	medium
WALOCEL MKW 20000 PP 40	Functional, non-ionic cellulose ether, improving water retention, modified for high standing strength	20.000	high
WALOCEL MKW 30000 PP 10	Functional, non-ionic cellulose ether, improving water retention, modified for easy workability	30.000	low
WALOCEL MKW 30000 PP 30	Functional, non-ionic cellulose ether, improving water retention, modified for high sag resistance	30.000	medium
WALOCEL MKW 40000 PP 10	Functional, non-ionic cellulose ether, impairing very high water retention, modified for easy workability	40.000	low
WALOCEL MKW 40000 PP 20	Functional, non-ionic cellulose ether impairing very high water retention, modified for easy workability	40.000	low
METHOCEL™ 306	Functional, non-ionic cellulose ether impairing very high water retention, adjusted modification for monocouche	30.000	medium
METHOCEL 267	Functional, non-ionic cellulose ether impairing very high water retention – improving standing strength	35.000	low

WALOCEL MKW: all Base Coat products: excellent water retention at high wet mortar temperatures and outstanding air void stabilisation.

For Decorative and Silicate Render (RTU) please see ETICS page 12.

* WALOCEL products: 2% solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C; METHOCEL products: 2% solution in water, Brookfield RV, 20 rpm, 20°C



= no

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fair 

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Excellent

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outstanding

Cement Based Render | Redispersible Latex Powders

Product	Characteristics	Composition	Sub-Application
DLP 211 (DOW™ Latex Powder)	Polymer binder, rapidly dispersible in water with good saponification resistance	VAE-VeoVa	Decorative Render
DLP 212 (DOW Latex Powder)		VAE-VeoVa	Decorative Render

ETICS* and Dispersion Based Render | Cellulose Ethers

Product	Characteristics	Sub-Application	Viscosity [mPas]**
WALOCEL™ MKS 10000 PF 25	Functional rheological, non-ionic, multipurpose additive cellulose ethers with modification to improve sag resistance and workability	Adhesive & Base Coat Mortar	13.000
WALOCEL MKW 10000 PP 01	Functional, non-ionic cellulose ether, improving water retention, not modified	Cement Render, Top Coat	10.000
WALOCEL MKW 15000 PP 30	Functional, non-ionic cellulose ether, improving water retention with modification for very high sag resistance	Cement Render, Top Coat	15.000
WALOCEL MKW 20000 PP 40	Functional, non-ionic cellulose ether, improving water retention, modified for high standing strength	Cement Render, Top Coat	20.000
WALOCEL MKX 25000 PF 25 L		Adhesive & Base Coat Mortar	25.000
WALOCEL MKX 45000 PF 20 L	Functional rheological, non-ionic, multipurpose additive cellulose ethers to improve water retention and the workability of the mortar	Adhesive & Base Coat Mortar	45.000
WALOCEL MKX 45000 PF 40 L		Adhesive & Base Coat Mortar	45.000
METHOCEL™ 327		Adhesive & Base Coat Mortar	15.000
WALOCEL MKW 20000 PP 20	Functional rheological, non-ionic, multipurpose additive cellulose ethers to improve water retention & air void stability, less impact on cement hydration	Adhesive & Base Coat Mortar	20.000
WALOCEL MW 6000 PFV		Decorative Render (RTU)	6.000
WALOCEL MW 15000 PFV		Decorative Render (RTU)	15.000
WALOCEL MW 40000 PFV	Functional non-ionic cellulose ether with retarded dissolution to improve workability and to avoid segregation	Decorative Render (RTU)	40.000
WALOCEL CRT 10000 PV		Silicate Render (RTU)	10.000
WALOCEL CRT 40000 PV		Silicate Render (RTU)	40.000

* External Thermal Insulation Composite System

** WALOCEL products: 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C; METHOCEL products: 2 % solution in water, Brookfield RV, 20 rpm, 20°C

MFFT [°C]	Particle Size	Rheology	Hydrophobicity	Flexibility	Properties/ Behaviour of End-Product
3	powder, free-flowing	neutral	-	medium hard	versatile
0	powder, free-flowing	neutral	-	medium	multipurpose

Modification	Particle Size	Features of End-Product					
		Water Retention	Workability	Adhesion to Substrate	Adhesion to Insulation Board	Wetting Capability/Open Time	Efficient Thickening
medium	powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	-
no	powder, very fine	★★★★★	★★★★★	-	-	★★★★★	★★★★★
medium	powder, very fine	★★★★★	★★★★★	-	-	★★★★★	★★★★★
high	powder, very fine	★★★★★	★★★★★	-	-	★★★★★	★★★★★
medium	powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	-
medium	powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	-
high	powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	-
high	powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	-
medium	powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	-
retarded dissolution	powder, fine	★★★★★	★★★★★	-	-	★★★★★	★★★★★
retarded dissolution	powder, fine	★★★★★	★★★★★	-	-	★★★★★	★★★★★
retarded dissolution	powder, fine	★★★★★	★★★★★	-	-	★★★★★	★★★★★
retarded dissolution	powder	★★★★★	★★★★★	-	-	★★★★★	★★★★★
retarded dissolution	powder	★★★★★	★★★★★	-	-	★★★★★	★★★★★

- no ★★★★★ fair ★★★★★ good ★★★★★★ excellent ★★★★★★ outstanding



ETICS* | Redispersible Latex Powders

Product	Characteristics	Sub-Application	Composition
DLP 212 (DOW™ Latex Powder)	Polymer binder, rapidly dispersible in water with good saponification resistance	Adhesive & Base Coat Mortar	VAE-VeoVa
DLP 2141 (DOW Latex Powder)		Adhesive & Base Coat Mortar	VAE-VeoVa

* External Thermal Insulation Composite System

ETICS* and Dispersion Based Render | Acrylic Emulsion Polymers

Product	Characteristics	MFFT [°C]
UCAR™ DL 420 G	Universal binder	20
UCAR DL 432 S	Low odor binder for coalescent free systems	< 5
UCAR DL 424	High water resistant binder for renders	14
PRIMAL™ AC-337 ER	Marble stone binder for low coalescent formulations	14
PRIMALAC-339	Marble stone binder	28

* External Thermal Insulation Composite System



MFIT [°C]	Particle Size	Rheology	Hydrophobicity	Flexibility	Properties/Behaviour of End-Product
0	powder, free-flowing	neutral	–	medium	good dry and wet adhesion
0	powder, free-flowing	neutral	yes	medium hard	lower water absorption

Solids [%]	Properties/Behaviour of End-Product
49	Universal styrene acrylic. Can be used for primers.
50	Silicate stable, coalescent free polyvalent emulsion with excellent dirt pick up resistance.
50	Recommended for applications requiring superior water resistance due to very low water absorption. Stable with silicates.
45,5	Highly hydrophobic polymer with good water resistance. Ideal for marble stone finishes (no water whitening).
48	Highly hydrophobic polymer with good water resistance. Ideal for marble stone finishes (no water whitening).



Cement Modifier | Acrylic Emulsion Polymers

Product	Characteristics	MFFT [°C]	Solids [%]
PRIMAL™ CM-160	Low temperature cement modifier	1	50
PRIMAL CM-330	General purpose cement modifier	13	47

Cement Based Tile Adhesive – Basic Quality | Cellulose Ethers

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ MKX 40000 PF 01	Functional non-ionic cellulose ether to improve workability, water retention	40.000	no
WALOCEL MKX 60000 PF 01	Functional non-ionic cellulose ether to improve workability, water retention	60.000	no
WALOCEL MKX 60000 PF 15	Functional non-ionic cellulose ether to improve workability, water retention, slip resistance	60.000	medium
WALOCEL MW 40000 PFV	Functional non-ionic cellulose ether with retarded dissolution to improve workability, water retention	40.000	retarded dissolution
WALOCEL MW 60000 PFV	Functional non-ionic cellulose ether to improve workability, water retention	60.000	retarded dissolution
XCS 47136	Functional non-ionic cellulose ether to improve workability, water retention, slip resistance	60.000	medium

* 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C

** Temperature stability of wet mortar



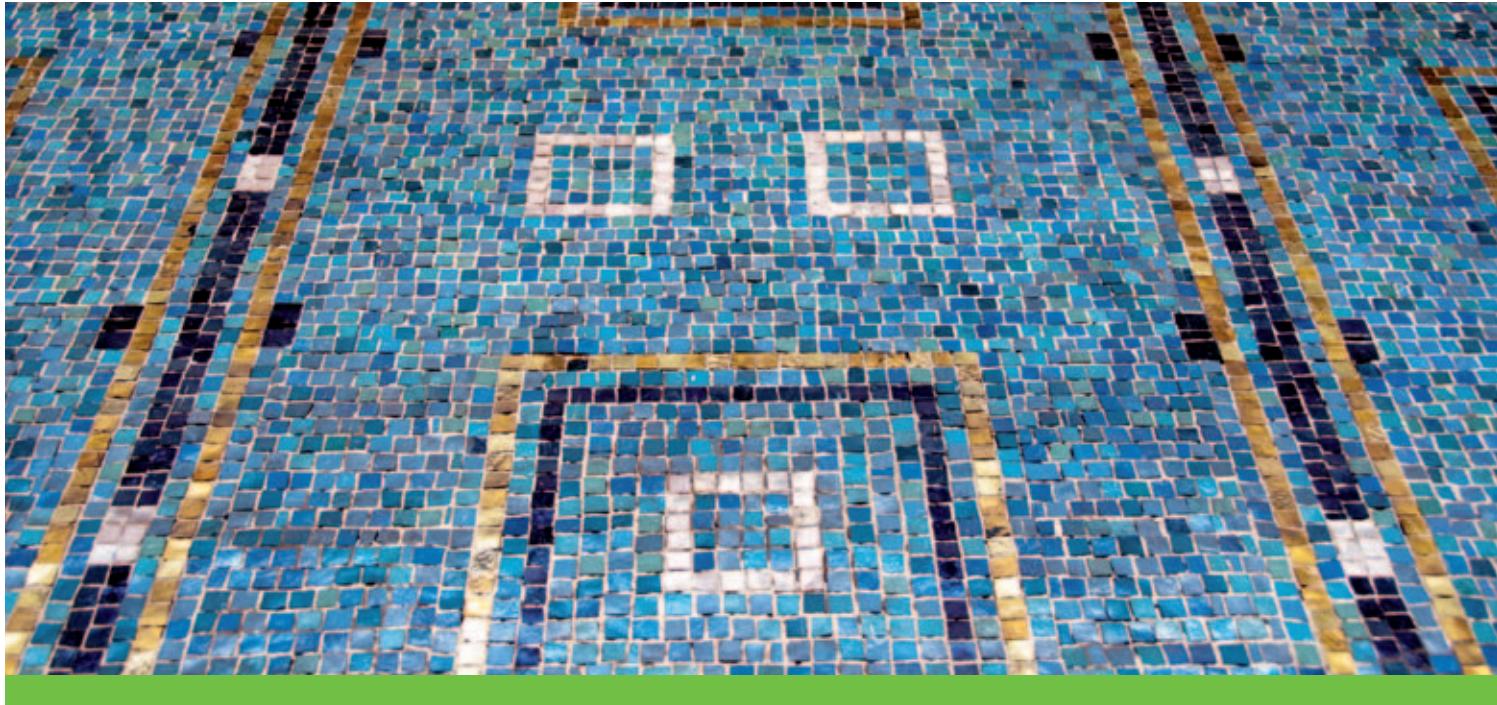
Properties/Behaviour of End-Product

Pure acrylic polymer designed for use under low temperatures with excellent adhesion to various substrates and high flexural and impact strength.
Especially suitable for repair mortars and industrial floor screeds.

Pure acrylic polymer for cement modification with excellent adhesion to various substrates and high flexural and impact strength.
Especially suitable for repair mortars and industrial floor screeds.

Particle Size	Features of End-Product					
	Water Retention	Long Adjustability Time	High Slip Resistance	Long Open Time	Temperature Stability**	Less Retarded Setting
powder, fine	★★★★★	★★★★★	-	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	-	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	-	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	-	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★

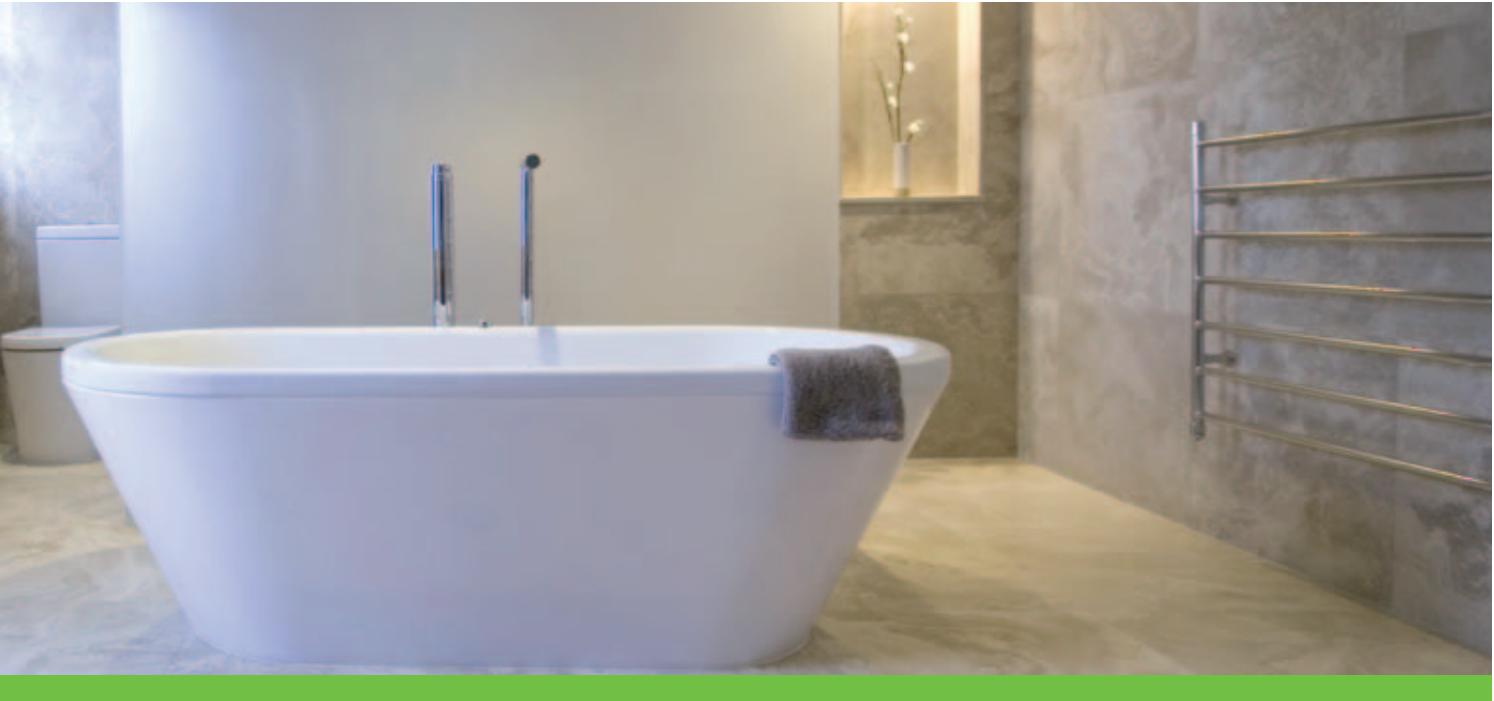
- no ★★★★★ fair ★★★★★ good ★★★★★★ excellent ★★★★★★ outstanding



Cement Based Tile Adhesive – Standard Quality (C1) | Cellulose Ethers

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ MW 15000 PFV	Functional non-ionic cellulose ether with retarded dissolution to improve workability, water retention	15.000	retarded dissolution
WALOCEL MKX 15000 PF 01	Functional non-ionic cellulose ether to improve workability, water retention	15.000	no
WALOCEL MKX 20000 PP 10	Functional non-ionic cellulose ether to improve workability, water retention	20.000	low
WALOCEL MKX 25000 PF 25 L	Functional non-ionic cellulose ether to improve workability, slip resistance	25.000	medium
WALOCEL MKX 25000 PF 50 L	Functional non-ionic cellulose ether to improve workability, slip resistance	25.000	high
WALOCEL MKX 40000 PF 01	Functional non-ionic cellulose ether to improve workability, water retention	40.000	no
WALOCEL MW 40000 PFV 50	Functional non-ionic cellulose ether with retarded dissolution to improve workability, water retention, slip resistance	40.000	high, retarded dissolution
WALOCEL MKX 45000 PP 10	Functional non-ionic cellulose ether to improve workability, water retention, slip resistance	45.000	low
WALOCEL MKX 45000 PF 20 L	Functional non-ionic cellulose ether to improve workability, water retention, slip resistance	45.000	medium
WALOCEL MKX 45000 PF 40 L	Functional non-ionic cellulose ether to improve workability, water retention, slip resistance	45.000	high
METHOCEL™ 267	Functional non-ionic cellulose ether to improve setting, workability, slip resistance	35.000	low
METHOCEL 327	Functional non-ionic cellulose ether improving adhesion strength, slip resistance	15.000	high
METHOCEL CP 1423	Functional non-ionic cellulose ether improving slip resistance	9.000	very high

* WALOCEL products: 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C; METHOCEL products: 2 % solution in water, Brookfield RV, 20 rpm, 20°C
 ** Temperature stability of wet mortar



Particle Size	Features of End-Product					
	Water Retention	Long Adjustability Time	High Slip Resistance	Long Open Time	Temperature Stability*	Less Retarded Setting
powder, fine	★☆☆☆☆	★☆☆☆☆	-	★☆☆☆☆	★☆☆☆☆	★☆☆☆☆
powder, fine	★☆☆☆☆	★☆☆☆☆	-	★☆☆☆☆	★★★★★	★☆☆☆☆
powder, very fine	★☆☆☆☆	★☆☆☆☆	★☆☆☆☆	★☆☆☆☆	★★★★★	★☆☆☆☆
powder, fine	★☆☆☆☆	★☆☆☆☆	★☆☆☆☆	★☆☆☆☆	★★★★★	★☆☆☆☆
powder, fine	★☆☆☆☆	★☆☆☆☆	★☆☆☆☆	★☆☆☆☆	★★★★★	★☆☆☆☆
powder, fine	★☆☆☆☆	★☆☆☆☆	-	★☆☆☆☆	★★★★★	★☆☆☆☆
powder, fine	★☆☆☆☆	★☆☆☆☆	★☆☆☆☆	★☆☆☆☆	★★★★★	★☆☆☆☆
powder, very fine	★★★★★	★★★★★	★☆☆☆☆	★☆☆☆☆	★★★★★	★☆☆☆☆
powder, fine	★★★★★	★★★★★	★☆☆☆☆	★☆☆☆☆	★★★★★	★☆☆☆☆
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★

- no

★☆☆☆☆

fair

★☆☆☆☆

good

★☆☆☆☆

excellent

★★★★★

outstanding



Cement Based Tile Adhesive – High Quality (C2) | Cellulose Ethers

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ MKX 6000 PPV 01	Functional non-ionic cellulose ether with retarded dissolution to improve workability, water retention, open time, retarded dissolution	6.000 *	retarded dissolution
WALOCEL MKS 10000 PF 60	Functional non-ionic cellulose ether to improve workability, water retention, slip resistance	10.000 *	high
WALOCEL VP-M-49125		8.000*	medium
WALOCEL VP-M-6604	Functional non-ionic cellulose ether to improve workability, water retention, slip resistance, setting, open time	8.000*	low
METHOCEL™ 327		15.000 **	high
XCS 47131	Functional non-ionic cellulose ether with balanced set of application characteristics	15.000 *	no
New: WALOCEL Xact portfolio For high-quality (C2) CBTA	Characteristics	Viscosity [mPas]*	Modification
WALOCEL Xact 12-01-E	Functional non-ionic cellulose ether with improved bonding and compression strength	11.000*	no
WALOCEL Xact 06-35-E***	Functional non-ionic cellulose ether with improved adhesion, open time, slip resistance and workability	6.000*	medium
WALOCEL Xact 13-70-E	Functional non-ionic cellulose ether to improve workability, water retention, slip resistance, esp. at high water loads	13.000*	high
WALOCEL Xact 06-10-P	Functional non-ionic cellulose ether with improved bonding and workability	6.000**	low
WALOCEL Xact 06-60-P	Functional non-ionic cellulose ether to improve workability, water retention, slip resistance, esp.	6.000**	high
WALOCEL Xact 12-01-P	Functional non-ionic cellulose ether with improved bonding and workability	11.000**	no

* 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s-1, 20°C;

** 2% solution in water, Brookfield RV, 20 rpm, 20°C

*** Temperature stability of wet mortar

**** Adjusted rheology enabling higher bonding at higher water loads



Particle Size	Features of End-Product					
	Water Retention	Long Adjustability Time	High Slip Resistance	Long Open Time	Temperature Stability ***	Less Retarded Setting
powder, very fine	★★★★★	★★★★★	-	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	-	★★★★★	★★★★★	★★★★★
Particle Size	Features of End-Product					
	Improved Adhesion	Long Adjustability Time	High Slip Resistance	Long Open Time	Temperature Stability ***	Less Retarded Setting
powder, very fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★

- no

★★★★★ fair

★★★★★ good

★★★★★ excellent

★★★★★ outstanding



Cement Based Tile Adhesive | Redispersible Latex Powders

Product	Characteristics	Composition	MFFT [°C]
DLP 211 (DOW™ Latex Powder)		VAE-VeoVa	3
DLP 212 (DOW Latex Powder)	Polymer binder, rapid dispersible in water with good saponification resistance	VAE-VeoVa	0
DLP 2001 (DOW Latex Powder)		VAE-VeoVa	2

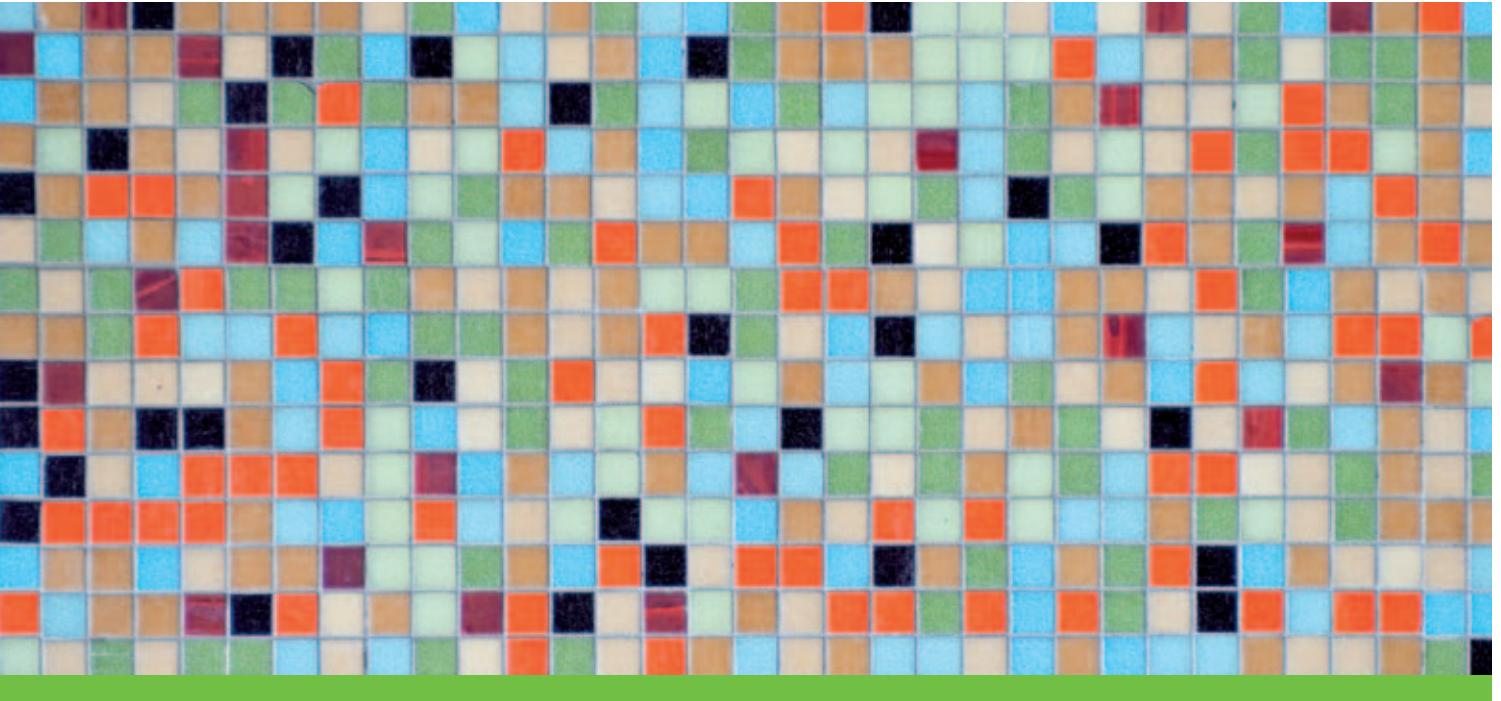
Tile Grouts | Cellulose Ethers

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ MT 400 PFV	Functional non-ionic cellulose ether with retarded dissolution to avoid segregation and to improve rheology and water retention	400	retarded dissolution
WALOCEL MKW 2000 PF 01	Functional non-ionic cellulose ether to avoid segregation and to improve rheology and water retention	2.000	no
WALOCEL MKW 4000 PF 01		4.000	no

* 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C

Tile Grouts | Redispersible Latex Powders

Product	Characteristics	Composition	MFFT [°C]
DLP 2141 (DOW™ Latex Powder)	Polymer binder, rapidly dispersible in water with good saponification resistance	VAE-VeoVa	0

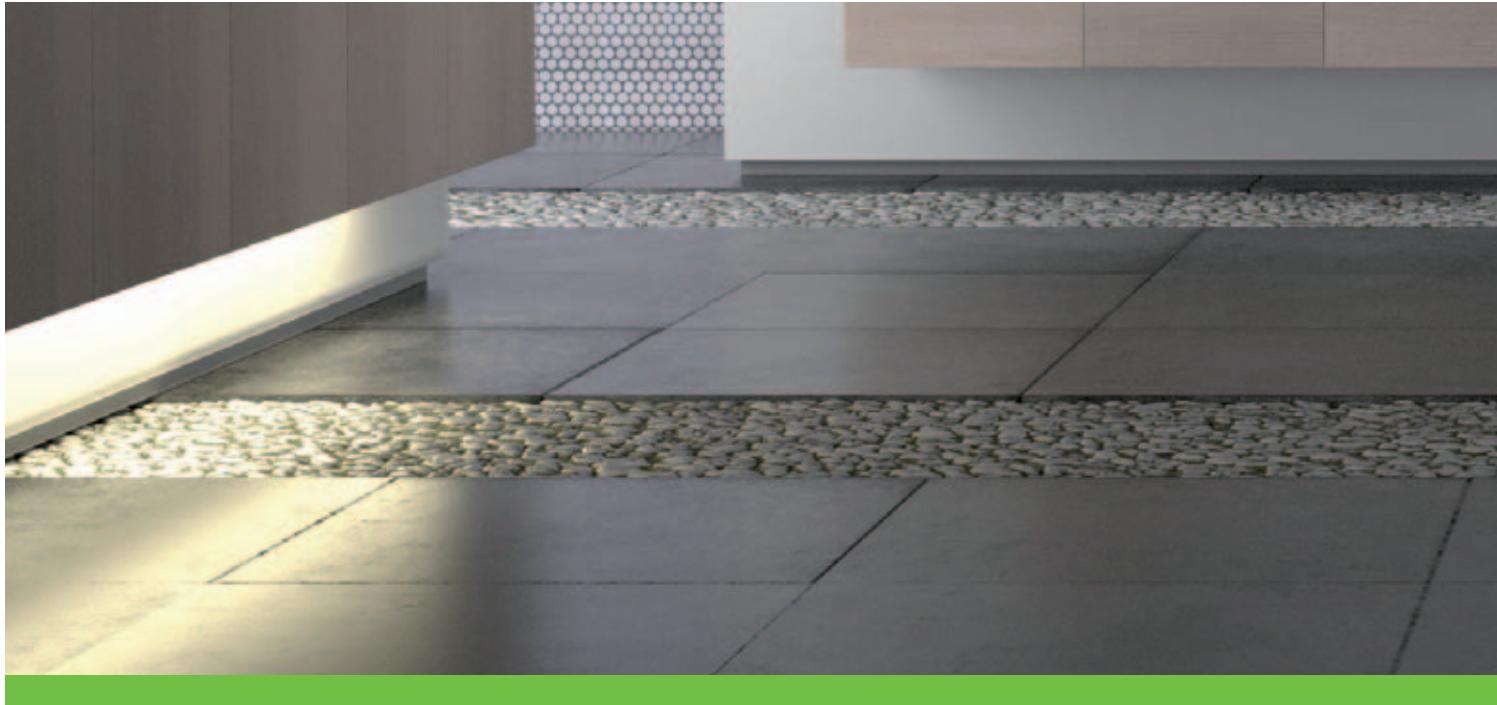


Particle Size	Rheology	Flexibility	Properties/ Behaviour of End-Product
Powder, free-flowing	neutral	medium hard	versatile
Powder, free-flowing	neutral	medium	multipurpose
Powder, free-flowing	neutral	medium hard	improved adhesion after water immersion



Particle Size	Features of End-Product				
	Workability	Less Retarded Setting	Shear Stability	Water Retention	
powder, fine	★★★★☆	★★★★★	★★★★☆	★★★★☆	
powder, fine	★★☆☆☆	★★☆☆☆	★★☆☆☆	★★☆☆☆	
powder, fine	★★☆☆☆	★★☆☆☆	★★☆☆☆	★★☆☆☆	
	– no	★★☆☆☆ fair	★★☆☆☆ good	★★☆☆☆ excellent	★★☆☆☆ outstanding

Particle Size	Rheology	Hydrophobicity	Flexibility	Properties/Behaviour of End-Product
powder, free-flowing	neutral	yes	medium hard	low water absorption



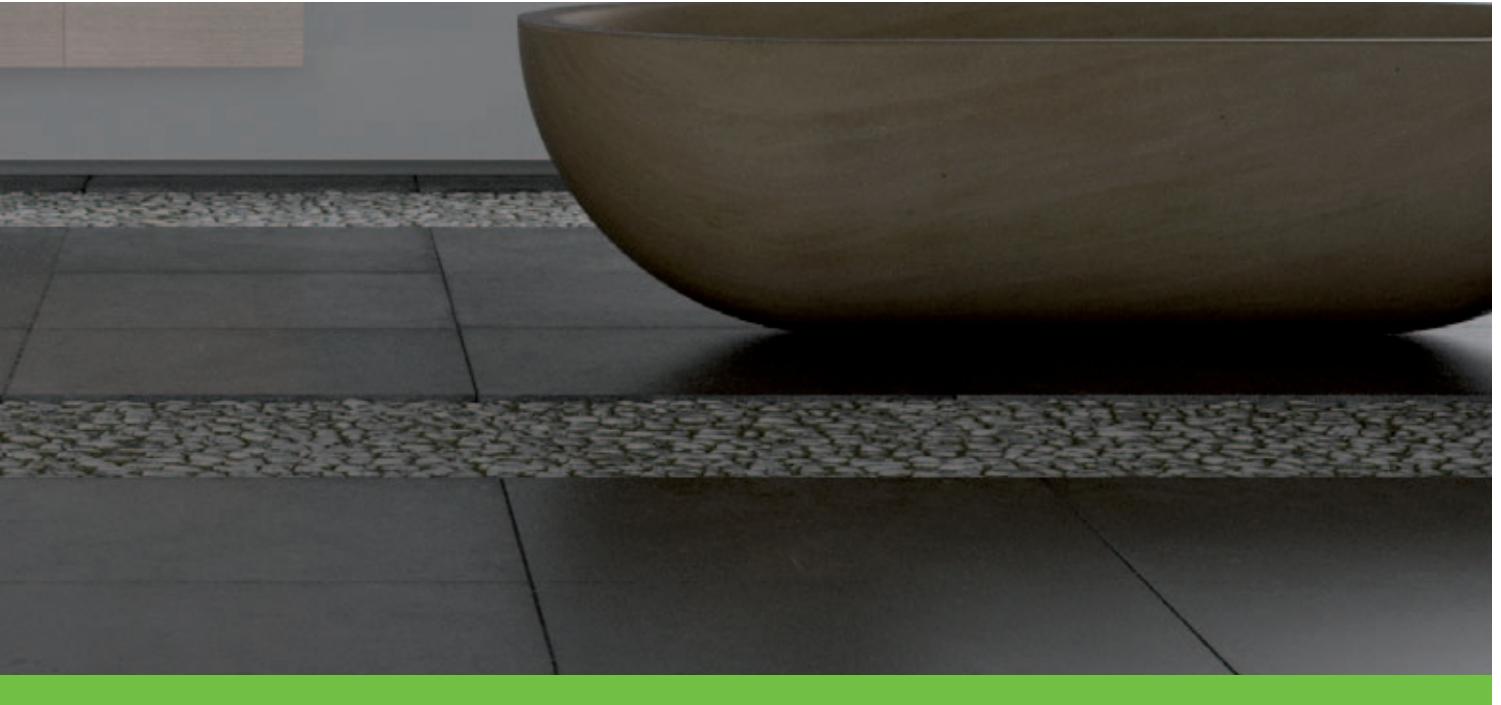
Dispersion Based Tile Adhesive | Cellulose Ethers

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ MW 15000 PFV	Functional non-ionic cellulose ether with retarded dissolution to improve workability and to avoid segregation	15.000	retarded dissolution
WALOCEL MW 40000 PFV	Functional non-ionic cellulose ether with retarded dissolution to improve workability and to avoid segregation	40.000	retarded dissolution
WALOCEL MW 40000 PFV 50	Functional non-ionic cellulose ether with retarded dissolution to improve workability and to avoid segregation – excellent slip resistance	40.000	highly modified, retarded dissolution
WALOCEL MW 60000 PFV	Functional non-ionic cellulose ether with retarded dissolution to improve workability and to avoid segregation	60.000	retarded dissolution
WALOCEL CRT 10000 PV	Functional ionic cellulose ether with retarded dissolution to improve workability and to avoid segregation	10.000	retarded dissolution
WALOCEL CRT 40000 PV		40.000	retarded dissolution

* 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C

Dispersion Based Tile Adhesive | Acrylic Emulsion Polymers

Product	Characteristics	MFPT [°C]
PRIMAL™ CM-230 ER	General purpose dispersion based tile adhesive	18



Particle Size	Features of End-Product			
	Water Retention	Workability	Long Adjustability Time	Efficient Thickening
powder, fine	★☆☆☆☆	★★★★☆	★★★★☆	★★★★☆
powder, fine	★★★★☆	★★☆☆☆	★★★★☆	★★★★☆
powder, fine	★★☆☆☆	★★★★☆	★★★★☆	★★★★☆
powder, fine	★★★★☆	★★☆☆☆	★★★★☆	★★★★☆
powder	★☆☆☆☆	★★★★☆	★★☆☆☆	★★★★☆
powder	★★★★☆	★★☆☆☆	★★★★☆	★★★★☆

- no ★☆☆☆☆ fair ★★★☆☆ good ★★★★☆ excellent ★★★★★ outstanding

Solids [%]	Properties/Behaviour of End-Product
50	Styrene acrylic polymer with very high water resistance, high binding power capability and excellent dry and wet adhesion on various substrates.



Self Leveling Underlayment (SLU) | Cellulose Ethers

Product	Characteristics	Viscosity [mPas]*	Modification
WALOCEL™ MT 400 PFV	Functional non-ionic, retarded cellulose ether with retarded dissolution to avoid segregation and to improve rheology and water retention	400	retarded dissolution
WALOCEL MKW 2000 PF 01	Functional non-ionic cellulose ether to avoid segregation and to improve rheology	2.000	no
WALOCEL MKW 4000 PF 01		4.000	no

* 2 % solution in water, Haake Rotovisko RV 100, shear rate 2.55 s⁻¹, 20°C

Self Leveling Underlayment (SLU) | Redispersible Latex Powders

Product	Characteristics	Composition	MFFT [°C]
DLP 2050 (DOW™ Latex Powder)	Polymer binder, rapid dispersible in water with good saponification resistance	VAE	3



Particle Size	Features of End-Product				
	Flow	No Segregation	Workability	Water Retention	Less Air Voids
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
powder, fine	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
		- no	★★★★★ fair	★★★★★ good	★★★★★ excellent
					★★★★★ outstanding

Particle Size	Rheology	Flexibility	Properties/Behaviour of End-Product
powder, free-flowing	flow modifier	medium hard	generates very low VOC emissions (suitable for systems that must comply with EMICODE EC 1 Plus)

Cementitious Waterproofing Membrane | Acrylic Emulsion Polymers

Product	Characteristics	Tg [°C]
UCAR™ LATEX R-161 E	Waterproofing flexible membrane for temperatures above 0°C	-7
PRIMAL™ CM-500	Waterproofing flexible membrane for very low temperatures (-20°C)	-35

Primer | Acrylic Emulsion Polymers

Product	Characteristics	MFFT [°C]
UCAR™ LATEX DL 420 G	Universal primer	20
FINNDISP™ AGP 04	Penetrating primer	1
UCAR™ LATEX XZ 91930.00	Stabilizing primer	< 5
PRIMAL™ AC-339	Water resistant sealer	28

Fibre Glass – High-Performance Nonwoven | Acrylic Emulsion Polymers

Product	Characteristics	Tg [°C]
PRIMAL™ ECO-16	Battery separators	33
PRIMAL ECO-46	Wall covering	-12
PRIMAL ECO-88	Flooring and roofing reinforcement	11
PRIMAL GL-618L		27

* UF: Urea Formaldehyde; MF: Melamine Formaldehyde

Solids [%]	Properties/Behaviour of End-Product
56	Styrene acrylic polymer for 2K-waterproofing membranes with excellent water and alkaline resistance and outstanding flexibility.
52,5	Pure acrylic polymer for 2K-waterproofing membranes supporting high flexibility at low temperatures, excellent water resistance and adhesion on various substrates.



Solids [%]	Properties/Behaviour of End-Product
49	Styrene acrylic binder for basic primer application. Excellent adhesion on various substrates.
33	Styrene acrylic polymer with very fine particle size and excellent penetration into porous substrates.
49	Styrene acrylic binder for basic primer application. Excellent adhesion on various substrates.
48	Very hydrophobic and alkali resistant pure acrylic polymer as primer or sealer for cementitious substrates with excellent resistance to efflorescence and excellent chalk adhesion.

Solids [%]	Properties/Behaviour of End-Product
45,5	Superior acid resistance good tensile strength, UF/MF* resins compatible.
47	Excellent dry and wet tensile strength, low water penetration, hydrophobic, durable to washing.
50	Good adhesion especially on polyester fibres. Excellent strength and solvent resistance, high dimensional stability at elevated temperatures, excellent durability to washing and dry-cleaning and excellent wet and dry tensile strength. Compatible with UF/MF* resins.
47	Superior dry wet and hot tensile strength; outstanding shear and chemical stability, low yellowing and foaming, UF/MF* resins compatible.



Fibre Cement Coating | Acrylic Emulsion Polymers

Product	Characteristics	MFFT [°C]	Solids [%]
PRIMAL™ AC-285	Primers for fibre cement fittings	5	61,5
PRIMAL E-357 EF	Primers and pigmented top coat	55	47,5
PRIMAL AC-339	Primers top coats, pigmented and clear	28	48

Sealant | Acrylic Emulsion Polymers

Product	Characteristics	Tg [°C]
PRIMAL™ E-3362	High quality pigmented sealant	-35
PRIMAL 2620	High quality translucent sealant	-34
PRIMAL 928 ER	High quality clear sealant	-3
PRIMAL P-308M	General pigmented sealant	8



Properties/Behaviour of End-Product

Low MFFT pure acrylic polymer for low VOC formulations. Recommended as primer for fibre cement fittings.

Pure acrylic polymer developed for use on fibre cement substrates with outstanding exterior durability, excellent efflorescence resistance and fast hardness development.

Very hydrophobic and alkali resistant pure acrylic polymer with excellent resistance to efflorescence and outstanding water whitening resistance. Could be used as primer but as well as top coat, pigmented and clear.

Solids [%]

Properties/Behaviour of End-Product

62

High solid pure acrylic polymer for water-based pigmented sealants. PRIMAL E-3362 provides excellent adhesion and flexibility and low modulus elasticity. Formulations pass requirements of ISO 11600 (type F, class 12.5P) or French SNJF standard.

62

High solid pure acrylic polymer for water-based translucent and pigmented sealants. PRIMAL 2620 provides outstanding adhesion and elasticity and meets the Aymar Cyclic Movement Test requirements (Class A, U.S. Federal Specification TT-S-00230C).

62,5

High solid styrene acrylic polymer for water-based clear and pigmented sealants. PRIMAL 928 ER dries fast and provides excellent clarity, excellent resistance to dirt-pick-up and blushing.

50

Styrene acrylic polymer for low VOC sealants with excellent wet strength, outstanding compatibility to silicate and excellent binding power.

Flooring Adhesives | Acrylic Emulsion Polymers

Product	Characteristics	Tg [°C]
PRIMAL™ CA-172	High performance flooring adhesive	-21
PRIMAL CA-187	Tackifier free flooring adhesive	-27
PRIMAL E-3362	General purpose flooring adhesives	-35
PRIMAL P-308M	Universal assembly adhesive	8

ADDITIVES | Synthetic Thickeners

Product	Characteristics	Solids [%]
ACRYSOL™ TT-615	Associative HASE* thickener	30
ACRYSOL RM-12W		19
ACRYSOL RM-2020-E		20
ACRYSOL RM-5000	Associative HEUR* thickener, non-ionic	18,5
ACRYSOL RM-8W		21,5
ACRYSOL SCT-275		17,5
ACRYSOL ASE 60 ER	ASE* thickener, anionic	28
ACRYSOL DR-72	Associative thickener	30

* ETICS: External Thermal Insulation Composite System; HEUR: hydrophobically modified ethoxylated urethane; HASE: hydrophobically modified alkali swellable emulsion; ASE: alkali swellable emulsion

Solids [%]	Properties/Behaviour of End-Product
61.0	High solid pure acrylic polymer for solvent-free floor adhesives that complies to EMICODE EC 1. PRIMAL CA-172 provides a long open time together with early strength development, an excellent shear stability, superior water and alkali resistance and superior adhesion on hydrophobic substrates.
60.5	High solid pure acrylic polymer for solvent-free and tackifier-free floor adhesives that complies to EMICODE EC 1. PRIMAL CA-187 provides an early strength development, an excellent peel adhesion, superior water and alkali resistance and outstanding tackiness.
62.0	High solid pure acrylic polymer for solvent-free floor adhesives that complies to EMICODE EC 1. PRIMAL-3362 provides excellent adhesion to linoleum and carpet floorings.
50.0	Versatile styrene acrylic polymer for low VOC assembly adhesives with excellent wet strength and excellent adhesion on sealed surfaces.

Properties/Behaviour of End-Product
Very efficient low and mid shear builder. Suggested for high sag resistance. Particularly suitable for dispersion based renders (ETICS*), sealants, flooring adhesives.
Low shear builder. Enhanced sag resistance. Particularly suitable for dispersion based renders (ETICS*), fibre cement coating, cool roof coating, dispersion based tile adhesive.
High shear builder, good levelling properties. Particularly suitable for fibre cement coating.
Efficient high shear builder showing balanced mid shear efficiency, good levelling properties. Particularly suitable for fibre cement coating.
Broad utility mid shear builder, excellent levelling properties, particularly suitable for fibre cement coating.
Good mid versus high shear efficiency, also generates low shear viscosity, can be used as sole thickener. Contains solvent. Particularly suitable for fibre cement coating.
Excellent low shear efficiency, great resistance to sedimentation and sagging. Particularly suitable for dispersion based renders (ETICS*), sealants, flooring adhesives.
Shear thinning rheology modifiers, particularly suitable for sealants, flooring adhesives.

ADDITIVES | Dispersants

Product	Characteristics	Solids [%]
OROTAN™ N-4045	Polyacid, sodium salt	45
OROTAN 731 A ER	Hydrophobic copolymer, sodium salt	25
OROTAN 165		21,5
OROTAN 681	Hydrophobic copolymer, ammonium salt	35
OROTAN 850 ER LO	Polyacid, sodium salt	30

* ETICS: External Thermal Insulation Composite System

ADDITIVES | Opaque Polymers

Product	Characteristics	Solids [%]
ROPAQUE™ Ultra E	Hollow sphere opaque polymer	30

More Applications We Serve

For more detailed information on the products available in these applications, please contact us.

**Concrete Admixtures**

We make PCE precursors allowing for an efficient production of super-plasticizers for concrete admixtures.

**Roof Tile Coatings**

We offer pure and styrene acrylic based solutions for concrete roof tiles as well as for metal roof tile coatings providing long term durability and adhesion.

Properties/Behaviour of End-Product

Enhanced cost/performance balance. Great colour acceptance with high reproducibility. Low odour. Low foam generator.
Particularly suitable for dispersion based renders (ETICS*), fibre cement coating.

Highly efficient dispersant with good pigment wetting. Particularly suitable for dispersion based renders (ETICS*), fibre cement coating.

Enhanced wet adhesion, good colour acceptance, particularly suitable for fibre cement coating.

Hydrophobic dispersant. Maximises gloss potential. Contains solvent. Particularly suitable for fibre cement coating.

High efficiency with low foam generation. Enhanced stability with reactive pigments. Particularly suitable for sealants, flooring adhesives.

Properties/Behaviour of End-Product

Opacifying synthetic pigment providing very efficient dry hiding for coatings.



Mineral Wool Thermal Insulation

AQUASET™ – The Environmentally Advanced
Alternative Binder for Mineral Wool Insulation Fibres*

Dow Construction Chemicals offers thermosetting resins that can be used as an alternative to traditional formaldehyde based resins for binding mineral fibres in the production of insulation blanket products that go into building insulation systems and specialty insulation.



Cool Reflective Roof Coating

Cool Reflective Roof Coatings help to increase the thermal comfort and the lifetime of roofs.

Dow Construction Chemicals offers binders, dispersants and synthetic thickeners for use in this application.

* Aquaset thermosets are made without formaldehyde or formaldehyde generating materials and do not release formaldehyde under normal operating conditions.

About Dow

Dow (NYSE: DOW) combines the power of science and technology to passionately innovate what is essential to human progress.

The Company is driving innovations that extract value from the intersection of chemical, physical and biological sciences to help address many of the world's most challenging problems such as the need for clean water, clean energy generation and conservation, and increasing agricultural productivity. Dow's integrated, market-driven, industry-leading portfolio of specialty chemical, advanced materials, agrosciences and plastics businesses delivers a broad range of technology-based products and solutions to customers in approximately 180 countries and in high growth sectors such as packaging, electronics, water, coatings and agriculture. In 2013, Dow had annual sales of more than \$57 billion and employed approximately 53,000 people worldwide. The Company's more than 6,000 products are manufactured at 201 sites in 36 countries across the globe.

References to "Dow" or the "Company" mean The Dow Chemical Company and its consolidated subsidiaries unless otherwise expressly noted. More information about Dow can be found at: www.dow.com.

**For more information please
send your email to:**
dccinfo@dow.com

Or consult our web site
www.dowcc.com

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