

# **Product Portfolio**

**Construction Chemicals** 



# **Market Segments**

The sustainable Construction market has grown considerably since the last decade and, consequently, the need arose to créate new methods of developing advanced material technology that are high performance, reduce waste and optimize productivity



Ceramic Tile Adhesives

Tile Grouts

Self levelling Mortars

### **Dow Solutions**

#### **Acrylic Solutions Polymers**

The business offers a wide range of emulsion polymers for the manufacture of building and Construction products to improve the properties of cementicious as well as non cementicous applications.

#### **Redispersable Latex Powder**

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

#### Cellulosic technology

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

#### ConChem Silicones

The range of proven and highly effective silicone-based products offer enhanced protection for a variety of key construction materials. Choose the right product with help of our experts for the development of long lasting building materials.

#### **CERAMIC BASED TILE ADHESIVES**



Dow Construction Chemicals offers cellulose ethers in a range of viscosity grades designed to improve the performance of adhesives. These additives provide creaminess, workability and consistency due to its pseudoplastic rheology. In addition to increasing water retention, reducing slippage, it improves wetting of ceramic tiles, increases open time, correction time and adhesion to the substrate

#### Celulose for Co adhesives

The second second	VISCOSITY				PRO	PERTIES	
PRODUCT	(mPas)	MODIFICATION	TION PRODUCT DESCRIPTION		WATER RETENTION	SLIP RESISTANCE	OPEN TIME
WALOCEL ™ MKX 60.000 PF 15	60.000	Medium	Modified cellulose with improved adjustment time and adhesion strength. Differentiated from other products because of its performance.	****	****	****	****
WALOCEL ™ MW 40.000 PFV	40.000	Retarded dissolution	Cellulose with wide formulation versatility and robust performance, suggested as a good cost-efficient solution for thickening purposes.	****	****	***	****
WALOCEL ™ MW 60.000 PFV	60.000	Retarded dissolution	Multipurpose cellulose, suggested as an excellent cost-efficient solution for thickening purposes.	****	****	***	****
WALOCEL™ M-20678	80.000	-	Recommended for high viscosity thickening purposes. Cost efficient cellulose with wide formulation versatility.	***	****	***	***







#### Celulose for C1 adhesives

	VISCOSITY				PROPE	RTIES	
PRODUCT	(mPas)	MODIFICATION	PRODUCT DESCRIPTION	WORKABILITY	WATER RETENTION	SLIP RESISTANCE	OPEN TIME
WALOCEL ™ MKX 45.000 PP 10	45.000	High	Modified cellulose with a good contribution to adhesion strength. Differentiated from other products for its excellent performance and optimum consistency.	****	****	****	****
WALOCEL ™ MKX 25.000 PF 25L	25.000	High	Modified cellulose with a good contribution to adhesion strength, impact resistance and low stickiness. Presents high yield performance.	****	***	***	****
WALOCEL ™ MKX 60.000 PF 15	60.000	Medium	Modified cellulose with improved adjustment time and adhesion strength. Differentiated from other products because of its performance.	****	****	***	****
WALOCEL ™ MKX 20.000 PP 10	20.000	Low	For easy to handle mortars thanks to its high workability. Offers a good contribution to adhesion strength.	****	****	***	****
WALOCEL ™ MW 40.000 PFV	40.000	Retarded dissolution	Cellulose with wide formulation versatility and robust performance, suggested as a good cost-efficient solution for thickening purposes.	****	***	***	***
WALOCEL ™ MW 60.000 PFV	60.000	Retarded dissolution	Multipurpose cellulose, suggested as an excellent cost-efficient solution for thickening purposes.	****	****	***	****

# Redispersable Polymers for C1 adhesives

		POLYMER		IMPROVES					
PRODUCT	MFFT (°C)	BASE	PRODUCT DESCRIPTION	Workability	Adhesive Strength	Flexural Strength	Abrasion	Transverse Deformation	
DLP 212	0	VAE- Veova	Flexible redispersable polymer that favors adhesion to a variety of substrates and provides excellent impact resistance.	***	****	****	***	***	
DLP 2001	2	VAE-Veova	Redispersable polymer that favors formulation versatility and provides excellent impact resistance.	****	****	****	****	***	
DLP 2000	3	VAE	Redispersable polymer with excellent performance, versatility and transversal flexural strength.	****	****	****	***	****	
DLP 2025	3	VAE	Cost efficient redispersable polymer designed for basic CBTAs.	***	****	****	****	**	

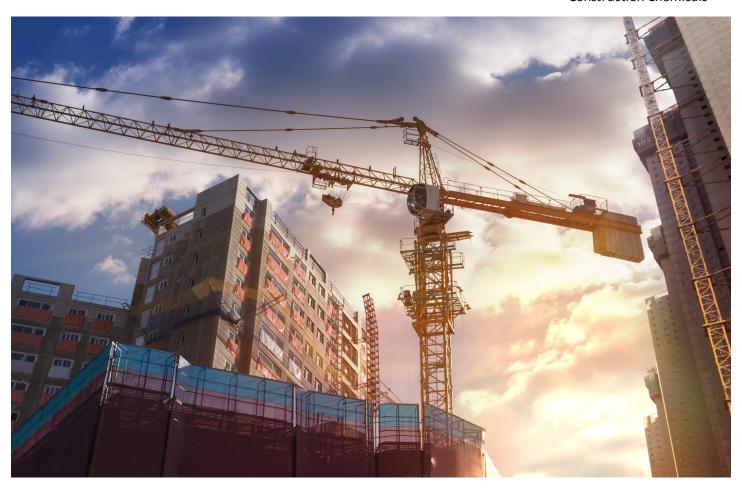


### Celulose for C2 adhesives

	VISCOSITY				PROPE	RTIES	
PRODUCT	(mPas)	MODIFICATION	PRODUCT DESCRIPTION	WORKABILITY	WATER RETENTION	SLIP RESISTANCE	OPEN TIME
WALOCEL ™ MKS 10.000 PF 60	10.000	High	Modified cellulose differentiated by its easy workability and optimum consistency. Presents excellent adhesion, low stickiness and high yield.	****	****	****	***
WALOCEL ™ VP-M- 49125	8.000	Medium	Excellent option for mortars with an open time of over 20 minutes. Differentiated by its improved adhesion strength and workability. Presents excellent overall performance.	****	****	***	****
WALOCEL ™ Xact 13- 70-E	13.000	High	Highly modified cellulose designed specifically for high performance CBTAs. Its new technology results in improved slip resistance and bonding.	****	****	****	****
WALOCEL™ MKX 45.000 PP 10	45.000	High	Modified cellulose with excellent adhesion strength. Differentiated from other products for its excellent performance and optimum consistency.	****	****	***	****

## Redispersable Polymers for C2 adhesives

		POLYMER				IMPROVES		
PRODUCT	PRODUCT MFFT (°C) BASE		PRODUCT DESCRIPTION	Workability	Adhesive Strength	Flexural Strength	Abrasion	Transverse Deformation
DLP 2140	0	VAE -Veova	Hydrophobic redispersable polymer, resistant to efflorescence.	****	****	****	****	***
DLP 212	0	VAE- Veova	Flexible redispersable polymer that favors adhesion to a variety of substrates and provides excellent impact resistance.	****	****	***	***	***
DLP 2001	2	VAE- Veova	Redispersable polymer that favors formulation versatility and provides excellent impact resistance.	****	****	****	****	***
DLP 2000	3	VAE	Redispersable polymer with excellent performance, versatility and transversal flexural strength.	****	****	****	***	****



### Silicones for adhesives

PRODUCT	DOSAGE %	PRESENTATION	SUGGESTED USE
DOWSIL™ GP SHP 50 Silicone Hydro- phobic Powder	0,2-0,8	Silane /siloxane- based powder	Free flowing powder added to dry ingredients of cement based dry mixes in order to reduce water absorption. The active material is released upon the addition of water and provides hydrophobicity upon cure.
DOWSIL™ GP SHP 60+ Silicone Hydro- phobic Powder	0,1-0,8	Resin/siloxane- based powder	Free flowing powder added to dry ingredients of demanding cement based dry mixes in order to reduce water absorption. The active material is released upon the addition of water and provides hydrophobicity upon cure

### **Tile Grouts**



### **Celuloses**

BRODUCT	PRODUCT VISCOSITY MOD		ODIFICATION PRODUCT DESCRIPTION		PROPERTIES				
PRODUCT	(mPas)	MODIFICATION	PRODUCT DESCRIPTION	WORKABILITY	WATER RETENTION	SLIP RESISTANCE	OPEN TIME		
WALOCEL ™ MT 400 PFV	400	Retarded dissolution	Cellulose with wide formulation versatility and high workability, with improved impact on sedimentation. Suggested for very thin tile grouts.	****	***	***	***		
WALOCEL ™ MKW 4000 PF 01	4.000	No	Workable, easy to use cellulose with good adhesion strength and improved adjustment time.	****	****	***	***		
WALOCEL ™ MKX 6000 PF 01	6.000	No	High yield cellulose designed to enhance the quality of tile grouts, with excellent adhesion strength, optimum consistency and low stickiness.	****	***	***	***		

Preference for viscosity depends on the market's perception. Our recommendation for thinner tile grouts are celluloses with excellent fluidity, preferably with lower viscosities!

# **Redispersable Polymers**

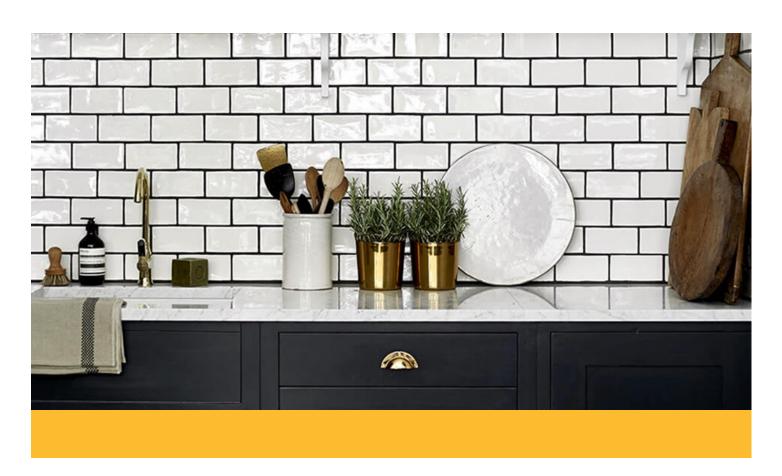
		DOLVMED			IMPROVES					
PRODUCT	MFFT (°C)	POLYMER BASE	PRODUCT DESCRIPTION	Workability	Adhesive Strength	Flexural Strength	Abrasion	Transverse Deformation		
DRYCRYL DP-2903	10	Acrylic	Redispersable polymer designed for cost efficient "one-pack" systems, providing dramatic improvements in properties such as adhesion and exterior durability.	***	****	****	****	***		
DLP 2140	0	VAE- Veova	Hydrophobic redispersable polymer, resistant to efflorescence.	****	****	****	****	***		
DLP 2141	0	VAE- Veova	Redispersable polymer that provides excellent impact resistance to help reduce the formation of cracks.	***	****	***	***	***		

### **Silicones**

PRODUCT	DOSAGE %	PRESENTATION	SUGGESTED USE
DOWSIL™ GP SHP 50 Silicone Hydrophobic Powder	0,2-0,8	Silane/siloxane-based powder	Free flowing powder added to dry ingredients of cement based dry mixes in order to reduce water absorption. The active material is released upon the addition of water and provides hydrophobicity upon cure.
DOWSIL™ GP SHP 60+ Silicone Hydrophobic Powder	0,1-0,8	Resin/siloxane-based powder	Free flowing powder added to dry ingredients of demanding cement based dry mixes in order to reduce water absorption. The active material is released upon the addition of water and provides hydrophobicity upon cure

# **Acrylics**

PRODUCT	MFFT (°C)	SOLIDS %	SUGGESTED USE
PRIMAL ™ 2500	17	50	Tough water resistant sealer that retards efflorescence. Suggested to formulate a 2K acrylic tile grout.



# **Self Leveling Mortars**



- 1. High compressive strength
- 2. Smoothness
- 3. Flowability
- 4. Quick set
- 5. Segregation resistance

#### **Celuloses**

PRODUCT	PRODUCT VISCOSITY M		PRODUCT DESCRIPTION	PROPERTIES				
PRODUCT	(mPas)	MODIFICATION	PRODUCT DESCRIPTION	WORKABILITY	WATER RETENTION	SLIP RESISTANCE	OPEN TIME	
WALOCEL ™ MT 400 PFV	400	Retarded dissolution	Cellulose with wide formulation versatility and high workability, with improved impact on sedimentation.	****	***	***	***	
WALOCEL ™ MKX 6000 PF 01	6.000	No	High yield cellulose designed to enhance the quality of tile grouts, with excellent adhesion strength, optimum consistency and low stickiness.	****	***	***	***	

### **Redispersable Polymers**

		POLYMER		IMPROVES					
PRODUCT	MFFT (°C)	BASE	PRODUCT DESCRIPTION	Workability	Adhesive Strength	Flexural Strength	Abrasion	Transverse Deformation	
DLP 2050	3	VAE	Redispersable polymer designed specifically for self levelling mortars, providing high compressive strength and enhanced surface quality. Low VOC.	****	****	****	****	****	
2000	3	VAE	Redispersable polymer with excellent performance, versatility and transversal flexural strength.	****	****	****	***	****	
2025	3	VAE	Cost efficient redispersable polymer designed for basic CBTAs.	***	****	****	****	**	

## Silicones DryMix

PRODUCT	DOSAGE %	PRESENTATION	SUGGESTED USE
DOWSIL™ GP SHP 50 Silicone Hydrophobic Powder	0,2-0,8	Silane/siloxane-based powder	Free flowing powder added to dry ingredients of cement based dry mixes in order to reduce water absorption. The active material is released upon the addition of water and provides hydrophobicity upon cure.
DOWSIL™ GP SHP 60+ Silicone Hydrophobic Powder	0,1-0,8	Resin/siloxane-based powder	Free flowing powder added to dry ingredients of demanding cement based dry mixes in order to reduce water absorption. The active material is released upon the addition of water and provides hydrophobicity upon cure

#### **Silicones Postreatment**

PRODUCT	DILUTION SYSTEM	ACTIVE CONTENT %	SUGGESTED ACTIVE CONTENT %	PRESENTATION	SUGGESTED USE
DOWSIL™ IE 6683 Emulsion	Water	40	5-10	Silane/siloxane resin blend	Water repellent suggested for porous substrates. May be applied by brushing/rolling or dipping, and does not change the appearance of the substrate. This emulsion is water dilutable and therefore low VOC.
DOWSIL™ Z-6689 Water Repellent	Solvent Dilutable (Aliphatic or alcohol)	> 98	5-10	Silane/siloxane blend	Water repellent suggested for porous substrates. May be applied by brushing/rolling or dipping, and does not change the appearance of the substrate.

### **Acrylics**

PRODUCT	MFFT (°C)	SOLIDS %	PROMOTED USE
PRIMAL™ CS-4000	27	48	Water resistant binder with excellent durability and gloss. Great adhesion on various substrates. Primer, curing membrane and sealers.
RHOPLEX ™ EI-6000	12-16	46	Water based resin with excellent durability to weathering, blushing resistance and gloss. Excellent adhesion to various substrates. Clear sealer and primer.
PRIMAL™ AS-8012	0	56	Cement modifying resin suggested as a primer and binder for high flexibility, alkaline resistant, self levelling floors.