



Dow Construction Chemicals

Versatile Technology for Solid Performance in Concrete and Cement-Based Applications



As demand for high-performance and easy-to-place materials grows in the concrete industry and in cement-based mortar applications, Dow Construction Chemicals offers a variety of advanced products designed to meet customers' needs for enhanced durability, UV and water resistance, toughness, flexibility, chemical resistance, abrasion resistance, adhesion, strength, workability and more.


Given the wide range of applications for cement-based systems, our products and know-how are well matched to deliver versatile performance and solutions backed by excellent technical service. Our complementary product offerings, WALOCEL™ and METHOCEL™ cellulose ethers, RHOPLEX™ latex emulsions,

DOW™ latex powders (DLP) and DRYCRYL™ redispersible powders, can help provide the desired chemistry and functionality for your formulating needs. In addition, our innovations are aimed at providing tomorrow's solutions in areas such as:

- VOC-compliant sealers
- More flexible waterproofing mortars
- Improved workability for cement plasters
- More durable repair mortars
- Balancing strength, durability and rheology for self-leveling flooring compounds
- Better control of cement-setting behavior

In the Spotlight

RHOPLEX™ AS-8008 is an acrylic-styrene emulsion designed to enable flexible cementitious mortars that display excellent water resistance and adhesion to various substrates. This latex modifier is especially useful for applications with thin sections.

APPLICATION	Solids (%)	Tg Onset °C	BROOKFIELD VISCOSITY (cPs) KEY	KEY FEATURES
 <p>Cementitious materials, such as:</p> <ul style="list-style-type: none"> • Waterproofing mortars and coatings • Mortars applied in thin sections • Patch and repair mortars for concrete restoration • Flexible insulating coatings 	56	-8	1,000	<ul style="list-style-type: none"> • Increased flexibility • Excellent water resistance • Excellent adhesion

Other All Purpose Cement Modifiers

PRODUCTS	APPLICATION	SOLIDS (%)	Tg (°C)	BROOKFIELD VISCOSITY (cPs)	KEY FEATURES
RHOPLEX™ AS-48 • Styrenated acrylic polymer	Flexible mortar applications, such as: • Mortars applied in thin sections • Below-grade waterproofing mortars • Tile adhesives	56	-6	300	<ul style="list-style-type: none"> • Enhanced flexibility • Excellent water resistance • Excellent adhesion
RHOPLEX™ E-330 • Styrenated acrylic polymer	Cement modifier	47	13	10 – 60	<ul style="list-style-type: none"> • UV durability • Excellent water resistance • Excellent substrate adhesion
RHOPLEX™ MC-1834P • Acrylic emulsion	<ul style="list-style-type: none"> • Cement modifier • Bonding agent 	47	13	10 – 60	<ul style="list-style-type: none"> • Low odor • UV durability • Excellent water resistance • Excellent substrate adhesion
RHOPLEX™ MC-76 • Acrylic emulsion	Sprayable and patching mortar applications	47	13	10 – 60	<ul style="list-style-type: none"> • Longer high-temperature pot life • UV durability • Excellent water resistance • Excellent substrate adhesion

Water-Based Concrete Cure Membranes and Sealers

PRODUCTS	APPLICATION	SOLIDS (%)	Tg (°C)	BROOKFIELD VISCOSITY (cPs)	KEY FEATURES
RHOPLEX™ CS-3800 • Styrenated acrylic polymer	Concrete cure membranes and sealers	45	40	200 – 2,000	<ul style="list-style-type: none"> • Highly hydrophobic • Lower VOCs
RHOPLEX™ CS-4000 • Acrylic polymer	<ul style="list-style-type: none"> • Clear or pigmented coatings and cure membranes • Primers/sealers for concrete 	48	32	200– 500	<ul style="list-style-type: none"> • High gloss • Durability
RHOPLEX™ EI-6000 • Acrylic polymer	<ul style="list-style-type: none"> • Clear matrix aggregate finishes for EIFS, metal roof tiles and elastomeric roof coatings • Primers/sealers for concrete 	46	26	50 – 1,500	<ul style="list-style-type: none"> • Lower VOCs • Resistance to water blush
RHOPLEX™ WL-91 • Styrenated acrylic polymer	Concrete and floor tile sealers	42	42	~200	<ul style="list-style-type: none"> • High gloss • Outstanding chemical resistance

Solvent-Based Concrete Sealers

PRODUCTS	APPLICATION	SOLIDS (%)	Tg (°C)	BROOKFIELD VISCOSITY (cPs)	KEY FEATURES
PARALOID™ B-66 100% • Thermoplastic acrylic resin	<ul style="list-style-type: none"> • Concrete/masonry sealer • Coating for metal and plastics 	100	50	12 – 13	<ul style="list-style-type: none"> • Solid-grade • Fast drying • Durable
PARALOID™ B-66X 51% • Thermoplastic resin	Coating	51	50	12 – 13	<ul style="list-style-type: none"> • Fast drying • Durable
PARALOID™ B-67 100% • Thermoplastic acrylic resin	General product finishing	100	50	11 – 12	<ul style="list-style-type: none"> • Solid-grade • Fast drying • Hardness
PARALOID™ B-67MT • Thermoplastic resin	Coating	45	50	11 – 12	<ul style="list-style-type: none"> • Slower drying • Most water-resistant
PARALOID™ B-64 100% • Thermoplastic acrylic resin	Clear coating for interior/exterior concrete floors/driveways	100	60	15 – 16	<ul style="list-style-type: none"> • Solid-grade • Hardness, flexibility and adhesion

Latexes for Cement Bond Coats

PRODUCTS	APPLICATION	SOLIDS (%)	T _g (°C)	BROOKFIELD VISCOSITY (cPs)	KEY FEATURES
RHOPLEX™ MC-1834P • Acrylic emulsion	• Cement modifier • Bond coat for mortars and plasters	47	13	10 – 60	<ul style="list-style-type: none"> • Low odor • UV durability • Excellent water resistance • Excellent substrate adhesion

Cellulose Ethers for Cement-Based Plasters (Renders)

PRODUCTS	2% AQUEOUS VISCOSITY (mPa*s) ⁽¹⁾	KEY FEATURES				
		WATER RESISTANCE	WORKABILITY	REDUCED INFLUENCE ON CEMENT SETTING	SHEAR STABILITY	SAG RESISTANCE
WALOCEL™ MKW 10000 PP 01 • Hydroxyethyl methyl cellulose	10,000	++	++	++++	++++	++
WALOCEL™ MKW 15000 PP 30 • Hydroxyethyl methyl cellulose, modified	15,000	++	+++	++	+++	++++
WALOCEL™ MKW 20000 PP 01 • Hydroxyethyl methyl cellulose	20,000	+++	++	++++	++++	++
WALOCEL™ MKW 20000 PP 20 • Hydroxyethyl methyl cellulose, modified	20,000	+++	++++	+++	+++	+++
WALOCEL™ MKW 20000 PP 30 • Hydroxyethyl methyl cellulose, modified	20,000	+++	++++	+++	+++	+++
WALOCEL™ MKW 20000 PP 40 • Hydroxyethyl methyl cellulose, modified	20,000	+++	+++	+++	+++	++++
WALOCEL™ MKW 30000 PP 10 • Hydroxyethyl methyl cellulose, modified	30,000	+++	+++	+++	+++	++
WALOCEL™ MKW 40000 PP 10 • Hydroxyethyl methyl cellulose, modified	40,000	++++	+++	+++	+++	++
WALOCEL™ MKW 40000 PP 20 • Hydroxyethyl methyl cellulose, modified	40,000	++++	+++	+++	++	+++

⁽¹⁾ Haake Rotovisko RV 100

⁽²⁾ + = Good

++ = Very Good

+++ = Excellent

++++ = Outstanding

Redispersible Latex Powders for Cement-Based Plasters (Renders)

Polymer binders, rapidly dispersible in water with good saponification resistance

PRODUCTS	COMPOSITION	MFFT (°C)	RHEOLOGY	FLEXIBILITY	KEY FEATURES
DLP 211	VAE-VeoVa	3	Neutral	Medium hard	Versatile
DLP 212	VAE-VeoVa	0	Neutral	Medium	Multipurpose
DLP 2020	VAE	3	Thixotropic	Medium hard	Improved sag resistance
DLP 2141	VAE-VeoVa	2	Neutral	Medium hard	Less water absorption
DLP 2001	VAE-VeoVa	2	Neutral	Medium hard	Improved water resistance

Cellulose Ethers for Cementitious Repair Mortars, Skim Coats and Fireproofing Mortars

PRODUCTS	APPLICATION	2% AQUEOUS VISCOSITY (mPa*s) ⁽¹⁾	KEY FEATURES
WALOCEL™ MKW 4000 PF 01 • Hydroxyethyl methyl cellulose	Repair mortars, grouts	4,000	Excellent workability
WALOCEL™ MKX 6000 PF 01 • Hydroxyethyl methyl cellulose	Repair mortars	6,000	<ul style="list-style-type: none"> • Good workability • Good application properties
WALOCEL™ MKS 10000 PF 60 • Hydroxyethyl methyl cellulose, modified	Skim coats, repair mortars	10,000	<ul style="list-style-type: none"> • Excellent open time • Excellent sag resistance • Good rheology for vertical and overhead applications
WALOCEL™ MKX 15000 PF 01 • Hydroxyethyl methyl cellulose	Skim coats, repair mortars, fireproofing mortar	15,000	<ul style="list-style-type: none"> • Multipurpose • Good workability
WALOCEL™ MKX 20000 PP 10 • Hydroxyethyl methyl cellulose, modified	Repair mortars	20,000	<ul style="list-style-type: none"> • Easy workability • Good sag resistance and standing strength • Excellent open time
WALOCEL™ MKX 25000 PF 25L • Hydroxyethyl methyl cellulose, modified	Repair mortars, fireproofing mortar	25,000	<ul style="list-style-type: none"> • Good workability • High yield • Good sag resistance
WALOCEL™ MKX 45000 PP 10 • Hydroxyethyl methyl cellulose, modified	Skim coats	45,000	High water retention

⁽¹⁾Haake Rotovisko RV 100

Redispersible Latex Powders for Repair Mortars

Polymer binders, rapidly dispersible in water with good saponification resistance

PRODUCTS	COMPOSITION	MFFT (°C)	RHEOLOGY	FLEXIBILITY	KEY FEATURES
DLP 212	VAE-VeoVa	0	Neutral	Medium	Multipurpose
DLP 2020	VAE	3	Thixotropic	Medium hard	Improved sag resistance
DLP 2101	VAE	0	Neutral	Flexible	Multipurpose
DRYCRYL™ 2903	Acrylic	3	Medium hard	Medium hard	One-pack formulations with performance equivalent to RHOPLEX™ MC-1834P

Cellulose Ethers for Self-Leveling Underlayments

Functional non-ionic cellulose ethers to avoid segregation and improve rheology and water retention

PRODUCTS	2% AQUEOUS VISCOSITY (mPa*s) ⁽¹⁾	KEY FEATURES				
		FLOW	SEGREGATION	WORKABILITY	WATER RETENTION	AVOID AIR VOIDS
METHOCEL™ CP 7331 • Hydroxypropyl methyl cellulose	100	+++	+	++++	+	++
METHOCEL™ CP 1119 • Hydroxypropyl methyl cellulose	300	++	++	+++	+	++
WALOCEL™ MT 400 PFV • Hydroxyethyl methyl cellulose	400	++	++	+++	+	+
WALOCEL™ MKW 2000 PF 01 • Hydroxyethyl methyl cellulose	2,000	++	++++	++	++	++
WALOCEL™ MKW 4000 PF 01 • Hydroxyethyl methyl cellulose	4,000	+	++++	++	+++	++

⁽¹⁾Haake Rotovisko RV 100

⁽²⁾ + = Good

++ = Very Good

+++ = Excellent

++++ = Outstanding

Redispersible Latex Powders for Self-Leveling Underlayments

Polymer binders, rapidly dispersible in water with good saponification resistance

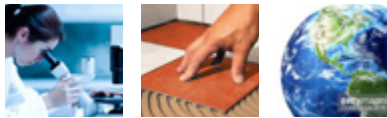
PRODUCTS	COMPOSITION	MFFT (°C)	RHEOLOGY	FLEXIBILITY	KEY FEATURES
DLP 212	VAE-VeoVa	3	Neutral	Medium hard	Versatile
DLP 2020	VAE-VeoVa	2	Neutral	Medium hard	Improved water resistance
DLP 2101	VAE	0	Neutral	Flexible	Multipurpose
DRYCRYL™ 2903	Acrylic	–	Neutral	Medium hard	One-pack formulations with performance equivalent to RHOPLEX™ MC-1834P

Cellulose Ethers for Cement-Fiber Extruded Materials

PRODUCTS	2% AQUEOUS VISCOSITY (mPa•s) ⁽¹⁾	KEY FEATURES
WALOCEL™ MKX 60000 PF 01 • Hydroxyethyl methyl cellulose	60,000	High water retention
WALOCEL™ VP-M-7701 • Hydroxyethyl methyl cellulose	70,000	<ul style="list-style-type: none"> • High water retention • High heat stability
WALOCEL™ M-20678 • Hydroxyethyl methyl cellulose	80,000	<ul style="list-style-type: none"> • High water retention • High efficiency • High heat stability

⁽¹⁾Haake Rotovisko RV 100

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Form No. 832-00224 - 1217
CDP 83234