



Polymer Emulsions & Specialty Chemicals

### Construction Solutions



#### Company Profile

We have been employing the power of science and customer intimacy since our humble

to fulfill this mission.

Our Tuzla plant investment also includes hot melt production with a capacity of 12,000 metric tons to serve the industrial adhesives market.

different business units:

- Textile & Leather Performance Solutions
- Industrial Adhesives Solutions
- Distribution & Industrial Solutions

future.

## Innovation promotes Sustainability

Contributing to the sustainability of our environment, our society and our economy is one of our most important responsibilities in today's rapidly changing world. We need to produce together, work hard for the future and realize the footprints we leave behind.

We believe that we can lead a better life together and aim to create a positive impact for all our stakeholders. Managing our environmental impacts, investing in projects that contribute to social sustainability, and developing future proof products and services continues to be high on our agenda.

Organik Kimya is taking the lead in achieving the UN's Sustainable Development Goals. We aim to become carbon neutral till 2050, continue our efforts in achieving environmental and social sustainability and investing in innovative solutions that contribute to circular economy. With all our efforts we contribute to SDGs 3,4,5,6,7,8,9,10,12,13 and 17.



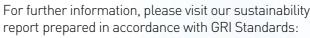












www.organikkimya.com/en/sustainability











#### Construction Solutions

In the ever changing and demanding construction market, innovative solutions, product quality and fast delivery to the market have been integral to respond to the market needs. quality and fast delivery to the market have been integral to respond to the market needs. Organik Kimya, supplying polymer emulsions to various markets since 1965, established a dedicated "Construction Solutions" business unit to better answer the needs of this industry. With its dedicated Research & Development, Sales, Marketing and Technical Solutions Teams, Organik Kimya's Construction Solutions Business Unit understands and delivers customer expectations.

The dedicated Research & Development and Commercial Teams have also been crowned with the inauguration of redispersible powder polymer plant. Today, Organik Kimya Construction Solutions Business Unit supplies the market with polymer emulsions redispersible powder polymers and specialty additives.

#### **Polymer Emulsions**

Offering a wide array of styrene, vinyl acetate and acrylic chemical compositions, Organil Kimya Construction Solutions offers innovative solutions with various polymerization technologies for the cementitious and dispersion based construction chemicals markets

#### Redispersible Powder Polymers

Construction Solutions provides solutions in carbon rich monomer combinations of vinyl versatate and acrylics that highlight properties such as water resistance, saponification resistance and flexibility.

#### Specialty Additives

Acrylic associative and non-associative rheology modifiers specifically are designed for fullfilling different application rheology requirements of different markets. Dispersion agents, both ammonia or sodium based salts, are able to work with different dispersing systems and chemistries. Rheology modifiers and dispersion agents are used in both dispersion based and liquid components of 2K Cementitious Systems.

#### Technical Solution Partnership Approach

Construction Solutions has dedicated synthesis and application laboratories within Organik Kimya's Research & Development Center. With state of the art equipment, Construction Solutions Laboratories are able to performe all application and analysis tests in accordance with the regional and international standards. Customer intimacy and solving customer needs is of utmost importance to Construction Solutions; therefore, joint projects and testing for customers at the laboratories are executed with much diligence.

# **Polymer Emulsions**Application Areas

	2K Cementitious Waterproofing Mortars	Elastomeric Waterproofing Membranes	Roof Coatings	Sealants	Dispersion Based Tile Adhesives	Cement / Concrete Modifiers	Curing Membrane & Concrete Sealers	Smooth Surface Contact Primers
Orgal® Hydroflex 57	***	**		**		*		
Orgal® K 640 N	***	**		**		*		
Orgal® K 640 R	****	**		**		*		
Orgal® K 635 N	****	**		**		*		
Orgal® Tibonder D2				*	****			**
Orgal® Tibonder D2P				*	****			**
Orgal® PST 65		****	***	****				
Orgal® Rooflex S6		****	****	****				***
Orgal® Rooflex 35		****	****	***				
Orgal® Roofxtreme 40		****	****	***				
Orgal® Hydroflex 10	*					****		
Orgal® P 803 CM	*					****		
Orgal® P 900 CM	**					***		
Orgal® 50 CM	*				**	****		*
Orgal® 100 CM	*				**	****		*
Orgal® PST 5010		**		****	*		*	
Orgal® Multiflex S5		**		***	*		*	****
Orgal® Betoprime S4		*		*			**	****
Orgal® P 056V		*		***			**	**
Orgal® K 6987							***	**
Orgal® PR 667							***	
Orgal® PR 670							***	
Orgal® PST 50 A				***		***	*	**
Orgal® P 526				***				

★★★★ Excellent ★★★ Very Good ★★ Good ★ Suitab



#### Dispersion Based Tile Adhesives | Polymer Emulsions

	Monomer Composition	Solid Content (% <u>+</u> 1)	рН	Viscosity (mPa.s, max)	MFFT (°C)	Tg (°C)		Adhesion After Heat Aging	Adhesion After Water Immersion	Workability	
Orgal® Tibonder D2P	S/AC	50	7.0 - 8.0	900	24	24	Orgal® Tibonder D2P	***	***	***	
Orgal® Tibonder D2	S/AC	50	7.5 - 9.0	1000	24	24	Orgal® Tibonder D2	****	***	**	
Orgal® PST 50 A	S/AC	50	7.5 - 9.0	11000	20	20	Orgal® PST 50 A	***	*	**	
Orgal® PST 5010	S/AC	50	7.5 - 9.0	2000	11	11	Orgal® PST 5010	**	*	**	

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## Elastomeric Waterproofing Membranes | Polymer Emulsions

	Monomer Composition	Solid Content (% <u>+</u> 1)	рН	Viscosity (mPa.s, max)	MFFT (°C)	Tg (ºC)		Water Resistance	Flexibility	Flexibility at Low Temperatures	Adhesion	Dirt Pick-up Resistance
Orgal® Roofxtreme 40	AC	65	7.0 - 8.0	2000	0	-25	Orgal® Roofxtreme 40	***	****	***	***	***
Orgal® Rooflex S6	S/AC	50	7.5 - 9.0	9000	0	-6	Orgal® Rooflex S6	***	***	**	***	***
Orgal® Rooflex 35	AC	60	5.0 - 7.0	1300	0	-35	Orgal® Rooflex 35	**	***	***	**	***
Orgal® PST 65	S/AC	50	7.5 - 9.0	13000	0	-3	Orgal® PST 65	**	***	**	***	**

#### Roof Coatings | Polymer Emulsions

	Monomer Composition	Solid Content (% <u>+</u> 1)	рН	Viscosity (mPa.s, max)	MFFT (°C)	Tg (°C)		Water Resistance	Flexibility	Flexibility at Low Temperatures	Dirt Pick-up Resistance	UV Resistance
Orgal® Roofxtreme 40	AC	65	7.0 - 8.0	2000	0	-25	Orgal® Roofxtreme 40	***	****	***	****	***
Orgal® Rooflex 35	AC	60	5.0 - 7.0	1300	0	-35	Orgal® Rooflex 35	**	***	***	***	***
Orgal® Rooflex S6	S/AC	50	7.5 - 9.0	9000	0	-6	Orgal® Rooflex S6	***	***	**	***	**
Orgal® PST 65	S/AC	50	7.5 - 9.0	13000	0	-3	Orgal® PST 65	**	***	**	**	*



#### 2K Waterproofing Mortars | Polymer Emulsions

	Monomer Composition	Solid Content (% <u>+</u> 1)	рН	Viscosity (mPa.s, max)	MFFT (°C)	Tg (°C)		Water Resistance	Crack Bridging	Crack Bridging at Low Temperatures	Adhesion	Workability
Orgal® Hydroflex 57	S/AC	57	7.0 - 9.0	1200	0	-10	Orgal® Hydroflex 57	***	***	**	****	***
Orgal® K 640 R	S/AC	57	7.0 - 9.0	1200	0	-10	Orgal® K 640 R	***	***	**	***	***
Orgal® K 640 N	S/AC	57	7.0 - 9.0	1200	0	-10	Orgal® K 640 N	***	***	**	****	***
Orgal® K 635 N	S/AC	53	6.0 - 8.0	1000	0	-23	Orgal® K 635 N	***	****	***	***	***



## 2K Self-Leveling Mortars & Screeds | Polymer Emulsions

	Monomer Composition	Solid Content (% <u>+</u> 1)	рН	Viscosity (mPa.s, max)	MFFT (°C)	Tg (°C)		Flow	Defoaming	Abrasion Resistance	
Orgal® K 640 R	S/AC	57	7.0 - 9.0	1200	0	-10	Orgal® K 640 R	**	*	**	
Orgal® P 803 CM	AC	47	9.0 - 10.0	300	10	15	Orgal® P803 CM	**	***	***	
Orgal® 50 CM	S/AC	50	7.5 - 9.0	7000	18	18	Orgal® 50 CM	*	**	***	

### Sealants | Polymer Emulsions

	Monomer Composition	Solid Content (% <u>+</u> 1)	рН	Viscosity (mPa.s, max)	MFFT (°C)	Tg (°C)		Water Resistance	Flexibility	Adhesion	Surface Properties	
Orgal® PST 65	S/AC	50	7.5 - 9.0	13000	0	-3	Orgal® PST 65	**	***	***	**	
Orgal® PST 5010	S/AC	50	7.5 - 9.0	2000	11	11	Orgal® PST 5010	***	**	***	***	
Orgal® PST 50 A	S/AC	50	7.5 - 9.0	11000	20	20	Orgal® PST 50 A	***	*	****	***	
Orgal® K 640 R	S/AC	57	7.0 - 9.0	1200	0	-10	Orgal® K 640 R	**	***	**	*	
Orgal® P 056V	S/AC	50	8.0 - 9.0	3000	0	6	Orgal® P 056V	**	**	***	**	
Orgal® P 526	VA / VV / AC	55	4.0 - 6.0	5000	11	25	Orgal® P 526	*	*	****	***	

#### Cement / Concrete Modifiers | Polymer Emulsions

	Monomer Composition	Solid Content (% <u>+</u> 1)	рН	Viscosity (mPa.s, max)	MFFT (°C)	Tg (°C)		Water Resistance	Abrasion Resistance	Flexural Strength	Workability
Orgal® P 803 CM	AC	47	9.0 - 10.0	300	10	15	Orgal® P803 CM	***	****	***	***
Orgal® 50 CM	S/AC	50	7.5 - 9.0	7000	18	18	Orgal® 50 CM	***	***	****	*
Orgal® 100 CM	S/AC	50	7.25 - 9.0	4000	20	20	Orgal® 100 CM	***	***	***	***
Orgal® P 900 CM	AC	47	9.0 - 10.0	300	5	6	Orgal® P 900 CM	**	**	**	***
Orgal® Hydroflex 10	AC	50	7.5 - 8.5	500	9	10	Orgal® Hydroflex 10	***	***	***	***



# Curing Membranes & Concrete Sealers | Polymer Emulsions

	Monomer Composition	Solid Content (% <u>+</u> 1)	рН	(mPa.s, max)	MFFT (°C)	Tg (°C)	Abrasion Water Penetration Resistance Resistance
Orgal® K 6987	AC	46	7.5 - 8.5	500	14	21	Orgal® K 6987 ★★ ★★★★ ★★★★
Orgal® PR 670	S/AC	30	7.0 - 8.0	100	0	8	Orgal® PR 670 ★★★ ★★★
Orgal® PR 667	S/AC	34	8.0 - 8.5	100	0	1	Orgal® PR 667 ★★★ ★★★ ★★

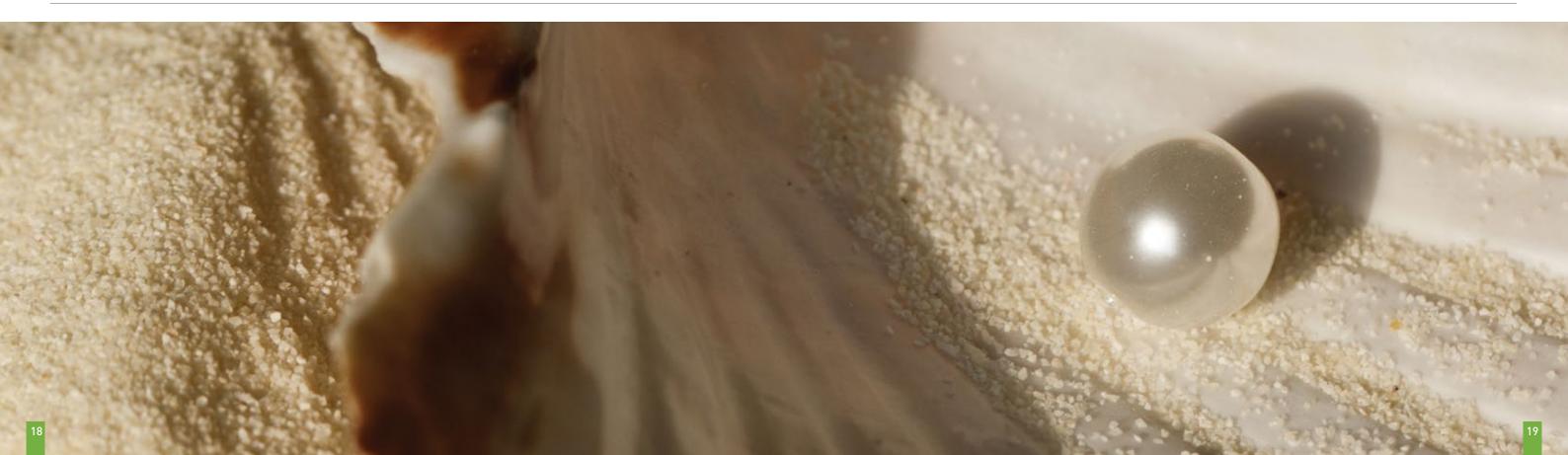


# Smooth Surface Contact Primers | Polymer Emulsions

	Monomer Composition	Solid Content (% <u>+</u> 1)	рН	Viscosity (mPa.s, max)	MFFT (°C)	Tg (°C)		Adhesion on Concrete	Adhesion on Various Surfaces	Water Resistance	Workability
Orgal® Betoprime S4	S/AC	50	7.5 - 9.0	9500	0	-4	Orgal® Betoprime S4	***	***	***	***
Orgal® Multiflex S5	S/AC	50	7.0 - 8.0	1000	0	5	Orgal® Multiflex S5	***	***	***	**
Orgal® PST 50 A	S/AC	50	7.5 - 9.0	11000	20	20	Orgal® PST 50 A	***	*	**	***

## Dispersants & Thickeners

	Chemical To Composition	otal Solids (% <u>+</u> 1)	рН	Viscosity (mPa.s, max)	Workability
Dispersant DMA 40	Sodium Polycarboxylate	40	5.0 - 6.0	2000	Dispersant DMA 40 Low foaming polymeric dispersing agent
Dispersant K 850	Sodium Polycarboxylate	30	9.0 - 10.0	350	Dispersant K 850 Polymeric dispersing agent
Dispersant ASP 40	Ammonium Polycarboxylate	e 40	6.5 - 7.5	400	Dispersant ASP 40 Low foaming polymeric dispersing agent
Orgal® M 340	ASE	30	2.0 - 4.0	n/a	Orgal® M 340 General purpose acrylic thickener with pseudoplastic profile
Orgal® M 420	ASE	28	2.0 - 4.0	n/a	Orgal® M 420 General purpose acrylic thickener with pseudoplastic profile
Orgal® HT 465	HASE	30	2.0 - 4.0	n/a	Orgal® HT 465  General purpose hydrophobically modified acrylic thickener with pseudoplastic profile



### Notes

#### Legend

	MFFT (°C)	
	Tg (°C)	
	Viscosity (mPa.s, max)	
	Viscosity (mPa.s, max)	
	n/a	Not Applicable
Hydrophobically Modified Alkali Swellable Emulsion		

