POLYURETHANE PRIMERS *EPOXY PRIMER SYSTEMS* POLYURETHANE BASED WATERPROOFING *BITUMEN BASED WATERPROOFING* POLYUREA BASED WATERPROOFING SYSTEMS *POLYURETHANE FINISH COATING* EPOXY COATING SYSTEMS *REPAIR, MORTAR AND REINFORCEMENT SYSTEMS* BINDER *INJECTION SYSTEMS* MARINE ADHESIVE *PACKAGING ADHESIVE* HEAT INSULATION SPRAY SYSTEMS *REFERENCE APPLICATIONS*

CONSTRUCTION
Chemicals







FLOKSER CHEMICAL

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POLYURETHANE

PRIMER

CREACASE PU PRIMER 1K

ONE COMPONENT POLYURETHANE PRIMER

PRODUCT DESCRIPTION

CREACASE PU PRIMER 1K is a one-component, low-viscosity, polyurethane-based primer. It is designed for substrates of different types or locations. The outstanding feature of the product is that it has a very low viscosity and stabilizes the curing speed. In this way, it perfectly covers and impregnates almost all kinds of porous (regardless of the pore state) or non-porous (glass, metal) surfaces homogenously. Even if the basecoat application is delayed, it does not cause a problem. It can be applied on dry and slightly damp concrete as a low cost effective waterproofing material that increases the durability of the substrate.

USAGE AREAS

- Application areas as a primer
- Concrete structures (moist, wet or wet concrete)
- Ceramic tiles
- Non-porous substrates such as glass, marble and metal.
- It can also be used as a concrete waterproofing material.

GENERAL PROPERTIES

- One component
- It has low viscosity.
- It can be easily applied to any surface, including wet/wet concrete.
- Adheres strongly even to glassy, non-porous substrates.
- It perfectly covers and impregnates to the surfaces. Even if the application of the basecoat is delayed, it does not cause a problem.
- It is elastic.
- Offers a low-cost solution for concrete sealing and protection.

TECHNICAL PROPERTIES	
Colour	Transparent, colourless
Density	0,95 ±0,05 gr/cm³
Hardness	75-80 (Shore A)
Viscosity	40-50 cps
Adhesion to concrete	2,2-2,4 (N/mm²)
Second layer application	4-5 hr
Recoat time	6 - 24 hr
Fully cured	24 hr

NOTE: *The technical specifications written above are based on the test results at 23°C and 50% relative humidity. Values may vary under different temperature and humidity conditions.*

APPLICATION METHOD

Floor preparation :

The surface should be cleaned, if possible, using a high pressure washer; Oil, grease, fuel and paraffin residues should be removed, as well as completely free from mold release agents, cement residues, chips, loose particles and cured membranes.

Application :

The material is applied with a roller or brush. For surface imperfections, it is recommended to use CREACSE PU PRIMER 1K treated with sand. Apply with brush or roller. Once cured, you can proceed to the application of the main membrane. Used tools and tools should be cleaned with CREASOL 100 as soon as possible. Rolls are disposable. It is not suitable for reuse.

Consumption :

100-200 g/m2 depending on the pore condition of the substrate

STORAGE	SHELF LIFE	PACKAGING
They should be stored in unopened original packaging in dry environments at temperatures between 5°C and 25°C. The material in the opened bucket should be used as soon as possible.	It can be stored for a minimum of 12 months in unopened original packages in dry environments at temperatures between 5°C and 25°C.	1 Lt, 5 Lt, 20 Lt special packages

NOTICE REGARDING SAFETY AND USAGE

During the application, flammable, combustible and flammable products should be kept away. No smoking. Care should be taken to ensure that the application area is constantly ventilated. Protective equipment such as goggles and gloves should be used during the application. In case of eye contact, rinse thoroughly with plenty of water. For detailed information, please request the Material Safety Data Sheet. It should be kept out of reach of children. The product should be consumed by professional users, taking into account the data in the technical information section.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER CHEMISTRY sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREACASE PU PRIMER 2K

TWO COMPONENT POLYURETHANE PRIMER

PRODUCT DESCRIPTION

CREACASE PU PRIMER 2K is a two-component polyurethane primer material that curesin a / cures in a short time and does not contain toxic substances. It has been specially designed for the application of polyurethane based products on damp and wet concrete surfaces.

USAGE AREAS

- As a primer material before polyurethane flooring and waterproofing
- Wet floors
- Application areas that are difficult to ventilate
- Floors made of concrete, steel and other materials
- Asphalt and asphalt membranes

GENERAL PROPERTIES

- Low viscosity and easy to use.
- It is hydrophobic and has high hydrolysis resistance.
- It is a polyurethane based primer that can be used for all general purpose concrete surfaces.
- It shows effective resistance against chemicals.

TECHNICAL PROPERTIES	
Colour	Red and gray
Appearance	Homogenous liquid
Density	1,25 ± 0,05 gr/cm³
Mixing ratio (A+B)	3 : 1
Solid content (A+B)	%85
Pot-life (+10°C)	40 - 50 mins
Pot-life (+25°C)	30 - 35 mins
Hardness	75 - 80 (Shore A)
Adhesion to concrete	2,2 - 2,4 (N/mm²)
Time between layers	4-6 hr
Recoat time	8 - 24 hr
Fully cured	24 hr

NOTE: *The technical specifications written above are based on the test results at 23°C and 50% relative humidity. Values may vary under different temperature and humidity conditions.*

APPLICATION METHOD

Floor preparation :

The surfaces to be applied must be solid. The surface must have a compressive strength of 25N/mm² and a strength of at least 1.5 N/mm² for adhesion testing. Loose, dismantled or moving concrete particles on the surface must be cleared of factors that will affect the adhesion performance, such as oil and paint residues, cement grout residues. In addition, the surfaces to be applied should be roughened and wiped with suitable tools and machines.

The surfaces to be wiped should be completely free of dust with industrial machines. Dust left in the surface pores can affect product performance and result in holes in the coating. For the surfaces to be coated in contact with the soil, water and water vapor barrier insulations must be made beforehand.

Preparation of the mixture :

The product is two-component and it is recommended to mix the amount to be consumed, taking into account the pot life of the mixture. Excess mixtures will become unusable after the pot life expires. In order for the mixture to be homogeneous, the product temperature must be +5°C and above.

Component A should be mixed in its own package for approximately 2-3 minutes with the help of a mixer with an average of 300 rpm. Then it should be added into the hardener (B component). A and B components should be mixed until homogeneous mixture is obtained.

Application :

The primer mixture, which is ready for application, is applied with a brush, roller or airless spray in such a way that all surfaces and pores are closed. The mixture prepared considering the pot life of the mixture should be consumed quickly. The application times between coats are very important for the durability of the coating to be made. It reaches full drying, mechanical and chemical resistance in 7 days.

Used tools and tools should be cleaned with CREASOL 100 as soon as possible. Rolls are disposable. It is not suitable for reuse.

Consumption : 100-200 g/m² depending on the floor substrate condition

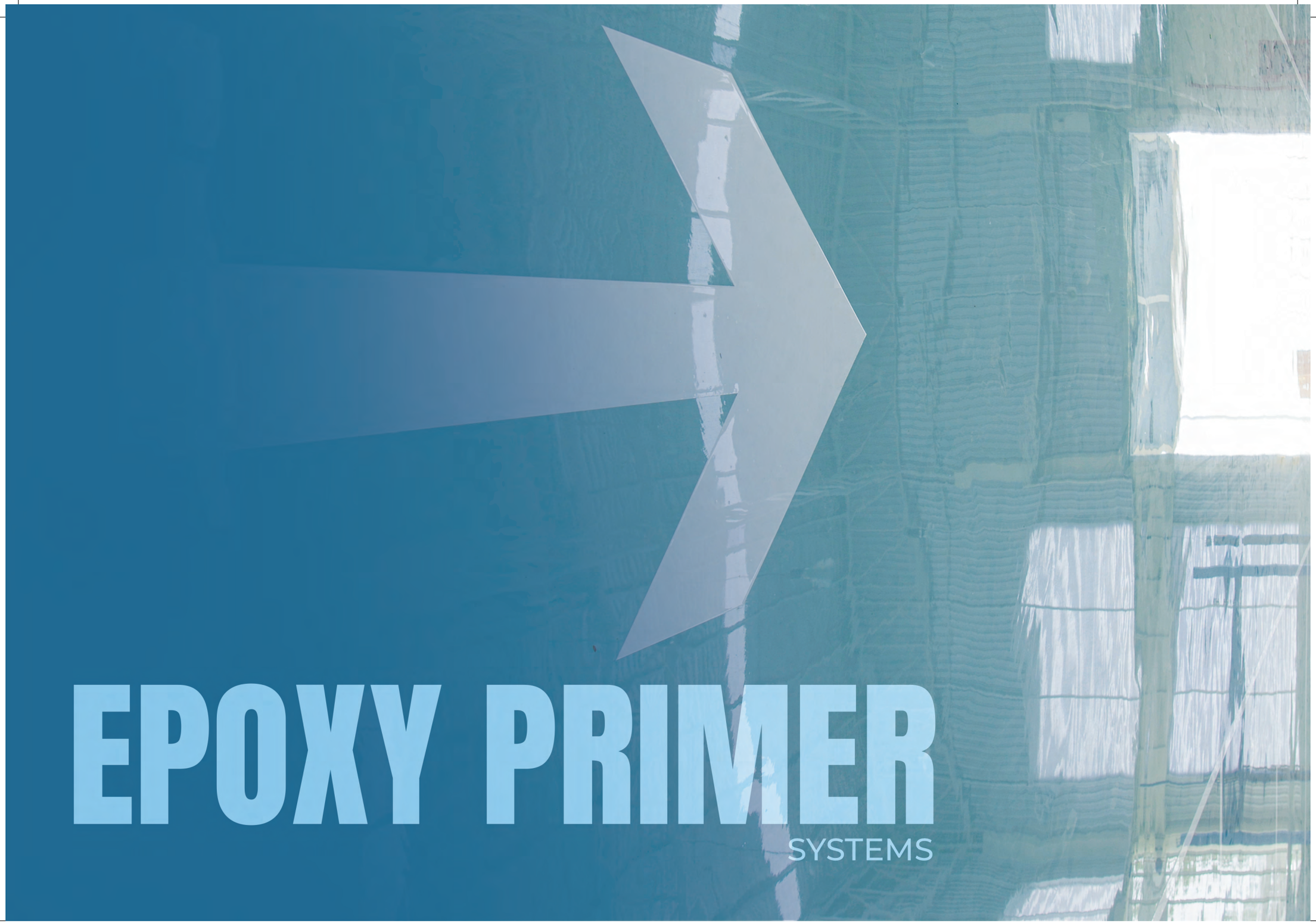
STORAGE	SHELF LIFE	PACKAGING
They should be stored in unopened original packaging in dry environments at temperatures between 5°C and 25°C. The material in the opened bucket should be used as soon as possible.	It can be stored for a minimum of 12 months in unopened original packages in dry environments at temperatures between 5°C and 25°C.	15+5, 3+1 Lt special packages

NOTICE REGARDING SAFETY AND USAGE

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EPOXY PRIMER

SYSTEMS

CREACASE EPNT

MOISTURE BARRIER EPOXY PRIMER

PRODUCT DESCRIPTION

Creacase EPNT is a two-component, solvent-free epoxy resin based primer. Mainly used as a moisture tolerant primer in the pretreatment of epoxy and polyurethane based materials.

USEGE AREAS

- Primer material for polyurethane insulation products in humid and rainy weather conditions
- Primer material for polyurea systems
- As a primer before the application of polyurethane foam
- As a primer before epoxy coating application
- Concrete reinforcement for loose floors
- Water and moisture barrier on concrete surfaces

GENERAL PROPERTIES

- Flexible
- Solvent free
- High Wetting Ability
- Can be applied on damp and wet concrete surfaces
- Curing continues in contact with water after application
- Excellent weather resistance
- Ease of application
- Resistance to mushrooms and algae
- Excellent adhesion of the substrate with the topcoat

TECHNICAL PROPERTIES		
PROPERTY	**TEST METHOD**	**TEST RESULT**
Density	ASTM D1475 / DIN 53217 / ISO 2811, 20°C	1,05 ± 0,05 kg/lt (A+5)
Mixing rate	-	EPNT A: % 62,5 / EPNT B: %37,5
		EPNT A / EPNT B : 100/60
Adhesion to concrete surface	ASTM D 4542	≥3 N/mm²
Application Temperature	-	Between +5 °C and +35 °C
Pot life	+10°C - + 30°C	45 - 60 min
Shore D	ASTM D2240 - 05	85
Recoat time	23°C and %50 relative humidity (RH)	12 hour
Light traffic	23°C and %50 relative humidity (RH)	24 hour
Exact lifetime	23°C and %50 relative humidity (RH)	7 day

APPLICATION METHOD

Surface Preparation :

The surface should be thoroughly cleaned of all kinds of dirt, rust, waste, cement particles that may affect the adhesion of the liquid membrane. Roughness of the surface should be removed and the entire surface should be dust-free.

Application :

The two-component Creacase EPNT mixture should be prepared in the amount to be used, which is obtained. In order to obtain a homogeneous mixture, care should be taken that the product temperature should not be less than 15 ° C. Creacase EPNT A and CREACASE EPNT B should be mixed with a mechanical mixer at low speed until they are homogeneous in the specified ratios.

Mixture, rmala, roller or brush to close the pores. Application time between coats is at least 8-12 hours (20 ° C), at most 10 days.

It is very important that the second coat is applied within the new coat application period mentioned above. It reaches a full mechanical and chemical strength in about 7 days.

Consumption :

It should be applied as 300-600 g / m2 in one or two coats.

STORAGE	SHELF LIFE	PACKAGING
It should be stored in its unopened original package at temperatures between + 5 °C and + 25 °C in a cool and dry environment protected from frost and sunlight.	Shelf life is 12 months.	Component A: 15 Kg. Net - Component B: 9 Kg. Net Total Set: 24 Kg. Net

NOTICE REGARDING SAFETY AND USAGE

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CREACASE EPNT 150

(PURE EPOXY PRIMER) RED HARDENER

PRODUCT DESCRIPTION

Creacase EPNT 150 is a two-component, solvent-free epoxy resin based primer. Mainly used as a primer in the pretreatment of epoxy and polyurethane based materials.

USEGE AREAS

- Primer material for polyurethane insulation products
- Primer material for polyurea system
- As a primer before the application of polyurethane foam
- As a primer before epoxy coating application
- Concrete reinforcement for loose floors.
- As a chemical resistant coating on concrete, stone, cement based mortars, epoxy-cement hybrid and epoxy products.

GENERAL PROPERTIES

- Solvent free
- High Wetting Ability
- Excellent weather resistance
- Ease of application
- Resistance to mushrooms and algae
- Excellent adhesion of the substrate with the topcoat

TECHNICAL PROPERTIES		
PROPERTY	**TEST METHOD**	**TEST RESULT**
Density	ASTM D1475 / DIN 53217 / ISO 2811, 20°C	1,05 ± 0,05 kg/lt (A+B)
Mixing rate	-	EPNT 250 A : %66,7
		EPNT 250 B : %33,3
		EPNT 150 A / EPNT 150 B:100/50
Adhesion to concrete surface	ASTM D 4542	≥3 N/mm²
Application Temperature	-	Between +5 °C and +35 °C
Shore D	ASTM D2240 - 05	85
Pot life	+10°C - + 30°C	45 - 60 min
Recoat time	23°C ve %50 relative humidity (RH)	8 - 12 hour
Light traffic	23°C ve %50 relative humidity (RH)	24 hour
Exact lifetime	23°C ve %50 relative humidity (RH)	7 day

APPLICATION METHOD

Surface Preparation :

The surface should be thoroughly cleaned of all kinds of dirt, rust, waste, cement particles that may affect the adhesion of the liquid membrane. Roughness of the surface should be removed and the entire surface should be dust-free.

Application :

The two-component Creacase EPNT 150 mixture should be prepared in the amount to be used, which is obtained. In order to obtain a homogeneous mixture, care should be taken that the product temperature should not be less than 15 ° C. Creacase EPNT 150 A and CREACASE EPNT 150 B should be mixed with a mechanical mixer at low speed until they are homogeneous in the specified ratios.

Mixture, rmala, roller or brush to close the pores. Application time between coats is at least 8-12 hours (20 ° C), at most 10 days. It is very important that the second coat is applied within the new coat application period mentioned above. It reaches a full mechanical and chemical strength in about 7 days.

Consumption :

It should be applied as 300-600 g / m2 in one or two coats.

STORAGE	SHELF LIFE	PACKAGING
It should be stored in its unopened original package at temperatures between + 5 °C and + 25 °C in a cool and dry environment protected from frost and sunlight.	Shelf life is 12 months.	Component A: 16 Kg. Net - Component B: 8 Kg. Net Total Set: 24 Kg. Net

NOTICE REGARDING SAFETY AND USAGE

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CREACASE EPNT 250

(PURE EPOXY PRIMER) TRANSPARENT HARDENER

PRODUCT DESCRIPTION

Creacase EPNT 250 is a two-component, odorless, clear, solvent-free epoxy resin based primer. Mainly used as a primer in the pretreatment of epoxy and polyurethane based materials.

USEGE AREAS

- Primer material for polyurethane insulation products
- Primer material for polyurea system
- As a primer before the application of polyurethane foam
- As a primer before epoxy coating application
- Concrete reinforcement for loose floors.
- As a chemical resistant coating on concrete, stone, cement based mortars, epoxy-cement hybrid and epoxy products.

GENERAL PROPERTIES

- Solvent free
- High Wetting Ability
- Excellent weather resistance
- Ease of application
- Resistance to mushrooms and algae
- Excellent adhesion of the substrate with the topcoat

TECHNICAL PROPERTIES		
PROPERTY	**TEST METHOD**	**TEST RESULT**
Density	ASTM D1475 / DIN 53217 / ISO 2811, 20°C	1,05 ± 0,05 kg/lt (A+B)
Mixing rate	-	EPNT 250 A : %66,7
		EPNT 250 B : %33,3
		EPNT 250 A / EPNT 250 B:100/50
Adhesion to concrete surface	ASTM D 4542	≥3 N/mm²
Application Temperature	-	Between +5 °C and +35 °C
Shore D	ASTM D2240 - 05	85
Pot life	+10°C - + 30°C	45 - 60 min
Recoat time	23°C and %50 relative humidity (RH)	8 - 12 hour
Light traffic	23°C and % 50 relative humidity (RH)	24 hour
Exact lifetime	23°C and % 50 relative humidity (RH)	7 day

APPLICATION METHOD

Surface Preparation :

The surface should be thoroughly cleaned of all kinds of dirt, rust, waste, cement particles that may affect the adhesion of the liquid membrane. Roughness of the surface should be removed and the entire surface should be dust-free.

Application :

The two-component Creacase EPNT 250 mixture should be prepared in the amount to be used, which is obtained. In order to obtain a homogeneous mixture, care should be taken that the product temperature should not be less than 15 ° C. Creacase EPNT 250 A and CREACASE EPNT 250 B should be mixed with a mechanical mixer at low speed until they are homogeneous in the specified ratios.

Mixture, rmala, roller or brush to close the pores. Application time between coats is at least 8-12 hours (20 ° C), at most 10 days. It is very important that the second coat is applied within the new coat application period mentioned above. It reaches a full mechanical and chemical strength in about 7 days.

Consumption :

It should be applied as 300-600 g / m2 in one or two coats.

STORAGE	SHELF LIFE	PACKAGING
It should be stored in its unopened original package at temperatures between + 5 °C and + 25 °C in a cool and dry environment protected from frost and sunlight.	Shelf life is 12 months.	Component A: 16 Kg. Net - Component B: 8 Kg. Net Total Set: 24 Kg. Net

NOTICE REGARDING SAFETY AND USAGE

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POLYURETHANE

BASED WATERPROOFING

CREACASE PU 150 1 K

SINGLE COMPONENT UV RESISTANT POLYURETHANE

PRODUCT DESCRIPTION

CREACASE PU 150 1K is a single component, UV resistant, polyurethane based liquid material. Easy to apply. It is an economical waterproofing system that offers simple solutions. It forms a highly elastic film by adhering strongly to all kinds of surfaces. CREACASE PU 150 1K contains pure elastomeric hydrophobic polyurethane resin, which has high chemical and mechanical resistance and provides excellent thermal resistance to the material.

USAGE AREAS

- In terraces, roofs, balconies and creek gutters,
- In wet areas under tiles, flower beds
- Foundation and foundation shear walls against water and corrosion in concrete structures,
- On building exteriors
- Lightweight roofs made of metal or fiber cement
- Asphalt membranes
- As the main waterproofing membrane in the waterproofing systems of car parks.
- Stadium tribunes
- In wood and sheet metal applications
- It can be applied to concrete, brick, tile, fiber cement board, plaster, wall, mortar, mosaic, metal and similar surfaces.

NOTE: *The technical specifications written above are based on the test results at 23°C and 50% relative humidity. Values may vary under different temperature and humidity conditions.*

GENERAL PROPERTIES

- One component
- Easy to apply in the field
- Economical to use
- It can be applied seamlessly and is resistant to water accumulation.
- It has excellent mechanical properties
- Exhibits effective resistance to chemicals
- Does not contain toxic substances after curing
- It has high elasticity and crack bridging properties.
- It is effective in water vapor permeability: Since the film breathes, moisture accumulation does not occur under the floor.
- Its thermal resistance is excellent, the product never softens. Maximum service temperature is 90°C, maximum shock temperature is 200°C.
- Resistant to cold: The film maintains its elasticity down to -40°C.
- Even if CREACASE PU 150 1K is damaged in any way, the damaged part can be easily repaired in a short time
- Although it does not require thinning, CREASOL 100 can be used depending on the conditions.

TECHNICAL PROPERTIES	
Density	1,37 - 1,42 gr/cm^3
Hardness	65 (Shore A)
Viscosity	2500-3500 cps
Water vapor permeability	0,8 gr/m^2 hour
Adhesion to concrete	>2,5 (n/mm^2)
Tensile Strength	>5 (N/mm^2) - (+23^{0}C)
Elongation	≥ %500
Curing time	6 - 8 hour
Recoat time	12 - 24 hour
Fully cured	7 days

APPLICATION METHOD

Floor preparation: :

The surfaces to be applied must be solid. The surface must have a compressive strength of 25 N/mm² and a strength of at least 1.5 N/mm² for adhesion testing. Loose, dismantled or moving concrete particles on the surface must be cleared of factors that may affect the adhesion performance, such as oil and paint residues, cement grout residues. In addition, the surfaces to be applied should be roughened and wiped with suitable tools and machines. The surfaces to be wiped should be completely free of dust with industrial machines. Dust remaining in the surface pores can result in product performance and holes in the coating.

Primer :

For absorbent surfaces: CREACASE PU PRIMER 1K or CRECASE PU PRIMER 2K

For hard and normal floors: CREACASE EPNT or CREACASE EPNT 150

Application :

Apply the material in at least two coats with a roller or brush. Wait 6-24 hours between coats. If you have exceeded the time limit (for example, more than 4 days) or if you are unsure of the adhesion between the coats, prime with CREASOL 100.

Consumption: First layer: 0.75-0.9 kg/m²
Second layer: 0.75-0.9 kg/m²
Minimum total consumption: 1.5-1.8 kg/m²

Packaging
1 Kg, 5 Kg , 25 Kg special metal buckets

NOTICE REGARDING SAFETY AND USAGE

During the application, flammable, combustible and flammable products should be kept away. No smoking. Care should be taken to ensure that the application area is constantly ventilated. Protective equipment such as goggles and gloves should be used during the application. In case of eye contact, rinse thoroughly with plenty of water. For detailed information, please request the Material Safety Data Sheet. It should be kept out of reach of children. The product should be consumed by professional users, taking into account the data in the technical information section.

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CREACASE PU 250 1 K

SINGLE COMPONENT POLYURETHANE

PRODUCT DESCRIPTION

CREACASE PU 250 1K is a single component, polyurethane based liquid material. Easy to apply. It is an economical waterproofing system that offers simple solutions. It forms a highly elastic film by adhering strongly to all kinds of surfaces. CREACASE PU 250 1K contains pure elastomeric hydrophobic polyurethane resin, which has high chemical and mechanical resistance and provides excellent thermal resistance to the material.

USAGE AREAS

- Gypsum and cement panels
- Tile/tile (under coating)
- Bathrooms
- Roofs
- Lightweight roofs made of metal or fiber cement
- Asphalt membranes
- As the main waterproofing membrane in the waterproofing systems of car parks.
- Stadium tribunes

GENERAL PROPERTIES

- It has excellent mechanical properties
- Exhibits effective resistance to chemicals
- Does not contain toxic substances after curing
- It has high elasticity and crack bridging properties.
- It is effective in water vapor permeability: Since the film breathes, moisture accumulation does not occur under the floor.
- Its thermal resistance is excellent, the product never softens. Maximum service temperature is 90°C, maximum shock temperature is 200°C.
- Resistant to cold: The film maintains its elasticity down to -40°C.
- Even if CREACASE PU 250 1K is damaged in any way, the damaged part can be easily repaired in a short time
- Although it does not require thinning, CREASOL 100 can be used depending on the conditions.

NOTE: *The technical specifications written above are based on the test results at 23°C and 50% relative humidity. Values may vary under different temperature and humidity conditions.*

TECHNICAL PROPERTIES	
Density	1,42 - 1,47 gr/cm^3
Hardness	70 (Shore A)
Viscosity	3500-5000 cps
Water vapor permeability	0,8 gr/m^2 hour
Adhesion to concrete	>2,4 (n/mm^2)
Tensile Strength	>4 (N/mm^2) - (+23^{0}C)
Elongation	≥ %400
Curing time	6 - 8 hour
Recoat time	12 - 24 hour
Fully cured	7 days

APPLICATION METHOD

Floor preparation:

The surfaces to be applied must be solid. The surface must have a compressive strength of 25 N/mm² and a strength of at least 1.5 N/mm² for adhesion testing. Loose, dismantled or moving concrete particles on the surface must be cleared of factors that may affect the adhesion performance, such as oil and paint residues, cement grout residues. In addition, the surfaces to be applied should be roughened and wiped with suitable tools and machines. The surfaces to be wiped should be completely free of dust with industrial machines. Dust remaining in the surface pores can result in product performance and holes in the coating.

Primer :

For absorbent surfaces: CREACASE PU PRIMER 1K or CRECASE PU PRIMER 2K

For hard and normal floors: CREACASE EPNT or CREACASE EPNT 150

Application :

Apply the material in at least two coats with a roller or brush. Wait 6-24 hours between coats. If you have exceeded the time limit (for example, more than 4 days) or if you are unsure of the adhesion between the coats, prime with CREASOL 100.

Consumption: First layer: 0.8-0.9 kg/m²
Second layer: 0.8-0.9 kg/m²
Minimum total consumption: 1.6-1.8 kg/m²

PACKAGING
1 Kg, 5 Kg , 25 Kg special metal buckets

NOTICE REGARDING SAFETY AND USAGE

During the application, flammable, combustible and flammable products should be kept away. No smoking. Care should be taken to ensure that the application area is constantly ventilated. Protective equipment such as goggles and gloves should be used during the application. In case of eye contact, rinse thoroughly with plenty of water. For detailed information, please request the Material Safety Data Sheet. It should be kept out of reach of children. The product should be consumed by professional users, taking into account the data in the technical information section.

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BITUME BASED

WATERPROOFING

CREACASE PUB 2K

TWO COMPONENT POLYURETHANE BITUMEN

GENERAL DESCRIPTION

Creacase PUB 2K is a two-component, bitumen polyurethane based, black colored, elastic, liquid, waterproofing material. The material adheres perfectly on the surface where it is mixed and applied, forming a flexible layer with water and moisture resistant crack closing properties.

APPLICATION AREAS

- Bathrooms, verandas and balconies (under tiles)
- Seamless waterproofing coating on basement and curtain walls
- Polyurethane insulation foams
- Underground garages-bunkers
- Prefabricated reinforced concrete parts etc.
- Concrete, brick, OSB and fiber cement sheets
- Can be applied on plaster, wall, mortar, mosaic, metal and similar surfaces.
- Bridge platforms
- Retaining walls
- Asphalt EPDM membranes, bathrooms (under tiles)
- Plant beds, green roofs
- Cut and close tunnels
- Irrigation canals

GENERAL PROPERTIES

- Fast curing.
- Impermeable to water vapor.
- Flexible structure.
- Easy to apply (brush, roller, spray)
- Perfect adhesion of the floor with the topcoat material
- Highly elastic and crack bridging
- Excellent adhesion
- Maintains its mechanical properties over a wide temperature range (-40°C to 90°C).
- Provides effective resistance to chemicals.
- Can also be used as control joint material.

COMPONENTS

COMPONENT	PRODUCT NAME	DESCRIPTIONS
Component A	Creacase PUB 2K A	Bitumen component
Component B	Creacase PUB 2K B	Prepolimer

COMPONENT RATIOS

COMPONENT	PRODUCT NAME	UNIT	VALUE
Bitumen Component	Creacase PUB 2K A	By weight	1
Prepolimer	Creacase PUB 2K B	By weight	1

REACTION CHARACTERISTICS

CONTROL CHARACTERISTIC	UNIT	VALUE	TEST METHOD
Exact lifetime	day	7	25° C and %50 relative humidity (RH)
Recoat Time	hour	8-12	23° C and %50 relative humidity (RH)
Light Traffic	hour	12-24	23° C and %50 relative humidity (RH)
Pot Life (+25°C)	min	35-40	25° C and %50 relative humidity (RH)

PHYSICAL AND MECHANICAL PROPERTIES OF PRODUCTS

PARAMETER	UNIT	VALUE	TEST METHOD
Density (A+B)	gr/cm³	0,97 ± 0,01	ASTM D1475 / DIN 53217 / ISO 2811, 20 °C
Adhesion to concrete surface	N/mm²	≥ 2	ASTM D 4542
Solid substance	%	100	-
Application temperature	°C	Between +5 °C and +35 °C	-
Hardness	Shore A	35-40	ASTM D 2240
Percent elongation at 23°C	N/mm²	≥ % 1000	ASTM D 412 / DIN 52455
Breaking at 23°C strength	N/mm²	>2	ASTM D 412 / DIN 52455

NOTE: The above technical specifications were tested at 23°C and 50% relative humidity. according to the result. Values may vary under different temperature and humidity conditions.

PROCESS CONDITIONS

Surface preparation :

Surfaces must be clean, sound and dry. Dust, oil, grease, old coatings, looseness, dusting, rust, hardening compounds, waxes, form oil and similar impurities should be removed or cleaned before application. Surfaces where rising humidity is expected

Do not apply. Application on fresh concrete floors after allowing to dry for at least 28 days your structure (moisture content should be below 5%).

Priming with one-component polyurethane on absorbent surfaces such as concrete, cement, screed, wood using the primer Creacase PPR 3100.

Bring the material to room temperature. Quickly mix the Bitumen component (A) and the Prepolymer (B) components in a ratio of 1:1 and mix for about 2 minutes (to allow air to mix). prevent). Mixing should be done with a low speed drill and mixing paddle. After mixing then let the mixture stand for about 1 minute to allow air bubbles to escape. Do not dilute with water, thinner or solvent! Do not add any fillers.

Application :

Pour Creacase PUB 2K onto the primed/prepared surface and spread with a roller, brush or trowel until the entire surface is covered. After 12-24 hours (wait no longer than 72 hours) apply a new coat of Creacase PUB 2K. If necessary, a third coat of Creacase PUB 2K can be applied. If Creacase PUB 2K is to be coated with ceramic tiles, saturate the top coat with baked silica sand (size 0.4-0.8mm) while wet. This additive will create an adhesion bridge. For best results, the temperature during application and curing is 5°C - 35°C between the two temperatures. Low temperatures delay curing, while high temperatures accelerate it. High humidity may affect the result.

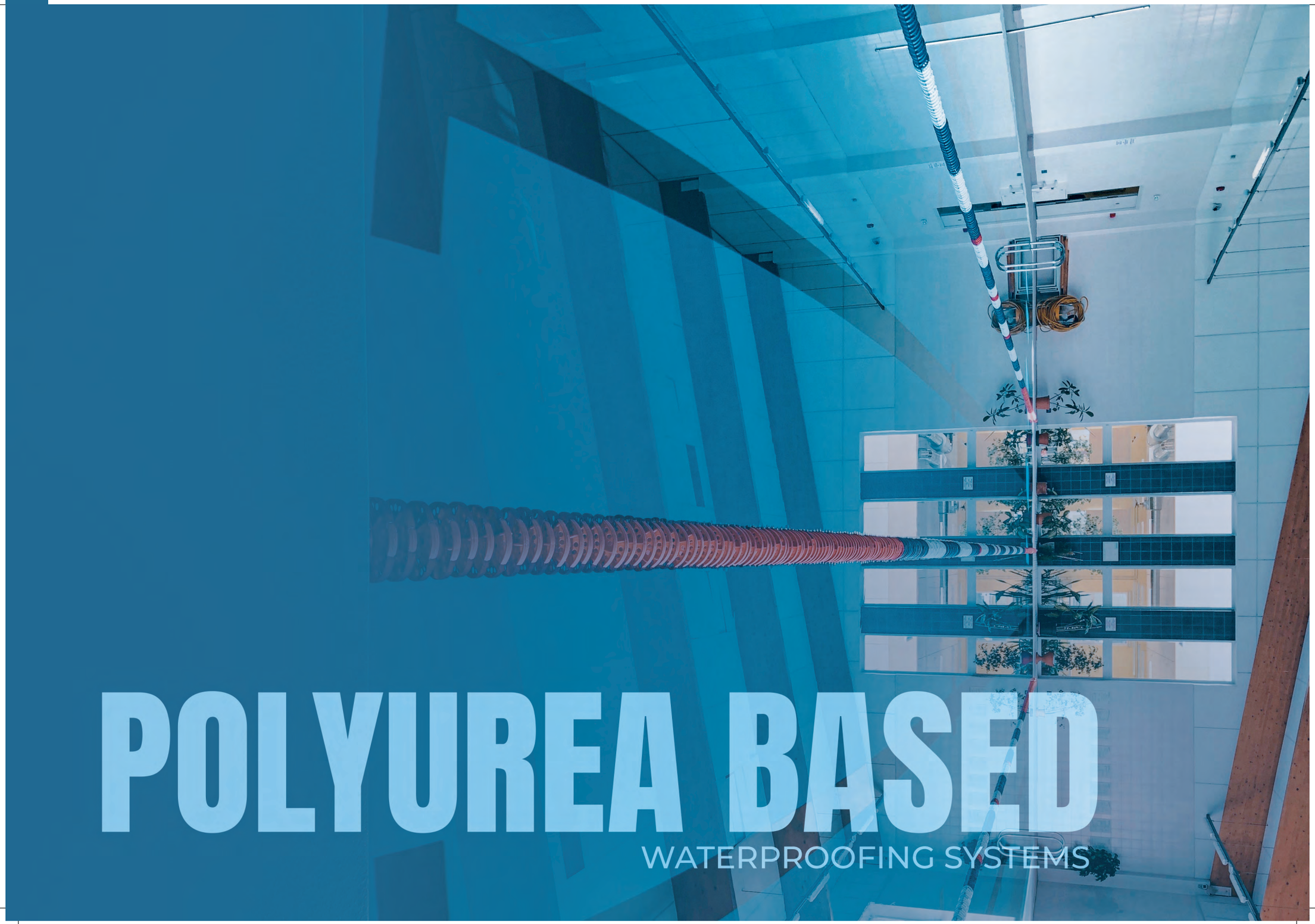
STORAGE	SHELF LIFE	PACKAGING
It should be stored in its unopened original packaging in a cool and dry place at temperatures between + 5o C and + 25o C, protected from frost and sunlight.	Shelf life is 9 months under appropriate storage conditions.	Available in 25x2 and 5x2 kg cans.

NOTICE REGARDING SAFETY AND USAGE

Flammable, combustible and flammable products should be kept away during application. Smoking should be avoided. Care should be taken to ensure continuous ventilation of the application area. Protective equipment such as goggles and gloves should be used during application. In case of eye contact, wash thoroughly with plenty of water. Request Material Safety Data Sheet for detailed information. Keep out of the reach of children. The product should be consumed by professional users, taking into account the data in the technical information section.

Material safety data sheet (MSDS) will be provided to you by your FLOKSER CHEMISTRY sales representative during product supply. It is recommended that you read this form carefully before handling and using the product and review your own handling, safety and usage conditions. It is recommended that you dispose of the finished product containers according to the disposal method in this form.

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POLYUREA BASED

WATERPROOFING SYSTEMS

CREACASE C-221

PURE POLYUREA

PRODUCT DESCRIPTION

Creacase C-221 is a two-component, highly reactive flexible pure polyurea spray coating material formed by the reaction of the isocyanate-based prepolymer and the multi-functional amine mixture.

USAGE AREAS

- Roofs
- Terraces
- Industrial surfaces
- Roads
- Parking Lots
- Pipes
- Car bedliners
- Pools

GENERAL PROPERTIES

- Fast curing
- Seamless coating application
- Application on vertical surfaces
- High mechanical strength
- Chemical resistance
- Corrosion resistance
- Abrasion resistance
- Environmentally friendly (VOC free)

TECHNICAL PROPERTIES				
	Unit	Prepolymer	Polyamine	Method
Density (25°C)	g/cm^3	1.10 - 1.12	1.00 - 1.05	ASTM D 4052
Viscosity (25°C)	cP	500 - 750	300 - 500	ASTM D 4878
Solid Content	%	100	100	In house test method
	Unit	Value	Method	
Gel Time	sec	3 - 5	In house test method	
Tack Free Time	sec	13 - 15	In house test method	
Hardness	Shore A	90 - 100	DIN 53505	
Tear Strength	N/mm	30 - 55	ASTM D 624	
Elongation	%	500 - 600	ASTM D 412	
Tensile Strength	N/mm^2	15 - 20	ASTM D 412	

APPLICATION METHOD

Creacase C-221 (polyamine) and the Creanate CI-05 (prepolymer) should be applied using high pressure and temperature spray equipment in order to ensure homogeneous mixture and application. Prior to the application, surfaces must be free from dust, dirt, oil and similar residues that will prevent the material adhesion.

	Unit	Value
Mixture ratio (iso/poly)	By weight	110 / 100
	By volume	100 / 100
Process Temperature	^{0}C	70 - 80
Process Pressure	bar	120 - 200

Consumption :

For 1 mm thickness polyurea coating 1,1-1,2 kg/m^2

STORAGE	SHELF LIFE	PACKAGING
Creacase C-221 and Crenate CI-05 is sensitive to moisture and should therefore be stored in sealed packages.	Creacase C-221 Creanate CI-05 can be stored for 6 months in its original sealed packaging at approximately 25oC. Storage at high temperatures shorten the shelf life.	Creacase C-221: Available in 200 kg drum Creanate CI-05: Available in 220 kg drum

NOTICE REGARDING SAFETY AND USAGE

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CREACASE C-123

HYBRID POLYUREA

PRODUCT DESCRIPTION

Creacase C-123 is a two-component, highly reactive, flexible hybrid polyurea based spray coating.

USAGE AREAS

- Roofs
- Terraces
- Industrial surfaces
- Roads
- Parking Lots
- Pipes
- Car bedliners
- Pools

GENERAL PROPERTIES

- Fast curing
- Seamless coating application
- Application on vertical surfaces
- High mechanical strength
- Chemical resistance
- Corrosion resistance
- Abrasion resistance
- Environmentally friendly (VOC free)

TECHNICAL PROPERTIES				
	Unit	Prepolymer	Polymix	Method
Density (25°C)	g/cm^3	1.10 - 1.12	1.00 - 1.05	ASTM D 4052
Viscosity (25°C)	cP	500 - 750	500 - 750	ASTM D 4878
Solid Content	%	100	100	In house test method
	Unit	Value	Method	
Gel Time	sec	8 - 10	In house test method	
Tack Free Time	sec	17 - 20	In house test method	
Hardness	Shore A	85 - 95	DIN 53505	
Tear Strength	N/mm	15 - 30	ASTM D 624	
Elongation	%	400 - 500	ASTM D 412	
Tensile Strength	N/mm^3	10 - 15	ASTM D 412	

APPLICATION METHOD

Creacase C-123 (polymix) and the Creanate CI-05 (prepolymer) should be applied using high pressure and temperature spray equipment in order to ensure homogeneous mixture and application. Prior to the application, surfaces must be free from dust, dirt, oil and similar residues that will prevent the material adhesion.

	Unit	Value
Mixture ratio (iso/poly)	By weight	110 / 100
	By volume	100 / 100
Process Temperature	^{0}C	70 - 80
Process Pressure	bar	120 - 200

Consumption :

For 1 mm thickness polyurea coating 1,1-1,2 kg/m^2

STORAGE	SHELF LIFE	PACKAGING
Creacase C-123 and Crenate CI-05 is sensitive to moisture and should therefore be stored in sealed packages.	Creacase C-123 Creanate CI-05 can be stored for 6 months in its original sealed packaging at approximately 25oC. Storage at high temperatures shorten the shelf life.	Creacase C-123: Available in 200 kg drum Creanate CI-05: Available in 220 kg drum

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER CHEMISTRY sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREACASE C-133

FLEXIBLE HYBRID POLYUREA COATING

GENERAL DESCRIPTION

Creacase C-133 is a two-component, highly reactive, flexible hybrid polyurea based spray coating.

APPLICATION AREAS

- Roofs
- Terraces
- Industrial surfaces
- Roads
- Parking Lots
- Pipes
- Car bedliners
- Pools

GENERAL PROPERTIES

- Fast curing
- Seamless coating application
- Application on vertical surfaces
- High mechanical strength
- Chemical resistance
- Corrosion resistance
- Abrasion resistance
- Environmentally friendly (VOC free)

TECHNICAL PROPERTIES				
	Unit	Creacase C-133 A	Creacase C-133 B	Test method
Density (25°C)	g/cm³	1.10 - 1.12	1.00 - 1.05	ASTM D 4052
Viscosity (25°C)	mPa.s	2200 - 2500	1400 - 1800	ASTM D 4878
	Unit	Value	Test method	
Gel time	sec	10 - 12	Internal Flokser Method	
Tack Free Time	sec	17 - 20	Internal Flokser Method	
Hardness	Shore A	75 - 85	DIN 53505	
Tear resistance	N/mm	25 - 35	ASTM D 624	
Elongation at break	%	>250	ASTM D 412	
Tensile strength at break	N/mm³	6 - 7	ASTM D 412	

PROCESS CONDITIONS

Creacase C-133 B (polymix) and the Creacase C-133 A (prepolymer) should be applied using high pressure and temperature spray equipment in order to ensure homogeneous mixture and application. Prior to the application, surfaces must be free from dust, dirt, oil and similar residues that will prevent the material adhesion.
The application temperature should be between 70-80°C, and the application pressure should be between 120 and 200 bar.

Consumption :

For 1 mm thickness polyurea coating 1,1-1,2 kg/m^2

STORAGE	SHELF LIFE	PACKAGING
Creacase C-133 B and Creacase C-133 A is sensitive to moisture and should therefore be stored in sealed packages.	Creacase C-133 B and Creacase C-133 A can be stored for 6 months in its original sealed packaging at approximately 25°C. Storage at high temperatures shorten the shelf life.	Creacase C-133 B : Available in 200 kg drum Creacase C-133 A: Available in 220 kg drum

NOTICE REGARDING SAFETY AND USAGE

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CREACASE C -700

TWO COMPONENT COLD POLYUREA

PRODUCT DESCRIPTION

CREACASE C-700 is a two component, polyurea based liquid material. Easy to apply. It is an economical waterproofing system that offers simple solutions.
CREACASE C-700 adheres strongly to any surface, forming a highly elastic film. It also has high chemical, mechanical and thermal resistance properties.

APPLICATION AREAS

- Tile/tile (under coating)
- Bathrooms
- Roofs
- Bridges and tunnels
- Lightweight roofs made of metal or fiber cement
- Asphalt membranes
- As the main waterproofing membrane in the waterproofing systems of car parks.
- Stadiums

GENERAL PROPERTIES

- It has excellent mechanical properties.
- It exhibits effective resistance against chemicals.
- It does not contain toxic substances after curing.
- It is effective in water vapor permeability: Since the film breathes, moisture accumulation does not occur under the floor.
- Its thermal resistance is excellent, the product never softens. Maximum service temperature is 90°C, maximum shock temperature is 200°C.
- Resistant to cold: The film maintains its elasticity down to -40°C.
- Even if the CREACASE C-700 is damaged in any way, the damaged part can be easily repaired in a short time
- Although it does not require thinning, CREASOL 100 can be used depending on the conditions.

TECHNICAL PROPERTIES	
Density	1,37 - 1,42 gr/cm^3
Hardness	65 (Shore A)
Viscosity	3000-4500 cps
Water Vapor Permeability	0,8 gr/m^2 hour
Adhesion to concrete	>2,5 (n/mm^2)
Tensile strength	>8 (N/mm^2) - (+23^{0}C)
Elongation	≥ %500
Pot-life	30 mins
Curing time	4 - 6 hour
Recoat time	12 -24 hour
Fully cured	7 days

NOTE: The technical specifications written above are based on the test results at 23°C and 50% relative humidity. Values may vary under different temperature and humidity conditions.

APPLICATION METHOD

Surface preparation:

The surfaces to be applied must be solid. The surface must have a compressive strength of 25N/mm² and a strength of at least 1.5 N/mm² for adhesion testing. Loose, dismantled or moving concrete particles on the surface must be cleared of factors that may affect the adhesion performance, such as oil and paint residues, cement grout residues. In addition, the surfaces to be applied should be roughened and wiped with suitable tools and machines. The surfaces to be wiped should be completely free of dust with industrial machines. Dust remaining in the surface pores can affect product performance and result in holes in the coating.

Application :

Apply the material in at least two coats with a roller or brush. Wait 4-12 hours between coats. If you have exceeded the time (for example, more than 2 days) or if you are not sure of the adhesion between the layers, clean the surface with one layer of CREASOL 100 and apply a new layer within 5-10 minutes.

- CREACASE PU PRIMER 1K, CREICASE PU PRIMER 2K for absorbent surfaces
- CREACASE EPNT 151 for hard and normal floors

Consumption: First layer: 0.75-0.9 kg/m²
Second layer: 0.75-0.9 kg/m²
Minimum total consumption: 1.5-1.8 kg/m²

STORAGE	PACKAGING	SHELF LIFE
They should be stored in unopened original packaging in dry environments at temperatures between 5°C and 25°C. The material in the opened bucket should be used as soon as possible.	CREACASE C-700 A: 25,5 kg CREACASE C-700 B: 1,5 kg	It can be stored for a minimum of 12 months in unopened original packages in dry environments at temperatures between 5°C and 25°C.

NOTICE REGARDING SAFETY AND USAGE

During the application, flammable, combustible and flammable products should be kept away. No smoking. Care should be taken to ensure that the application area is constantly ventilated. Protective equipment such as goggles and gloves should be used during the application. In case of eye contact, rinse thoroughly with plenty of water. For detailed information, please request the Material Safety Data Sheet. It should be kept out of reach of children. The product should be consumed by professional users, taking into account the data in the technical information section.

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POLYURETHANE

FINISH COATING

CREATOP 500 2K

ALIPHATIC TOP COAT PAINT

PRODUCT DESCRIPTION

CREATOP 500 2K is a two component, polyurethane based liquid top coat material that is easy to apply. It forms a highly elastic film by adhering strongly to all kinds of surfaces. It is applied in one or two coats with a brush, roller or airless spraying machine, with a minimum consumption of 0.200 kg/m² per coat.

It contains pure elastomeric hydrophobic polyurethane resin which is UV resistant, chemical resistant, mechanical resistant and thermally giving the material excellent resistive power.

USAGE AREA

- It can be used as a topcoat in floor applications,
- On waterproofing products.

GENERAL PROPERTIES

- High performance topcoat with effective traffic resistance,
- It perfectly covers colored products,
- It shows very good adhesion to all types of surfaces,
- It has excellent mechnical properties,
- High heat and UV resistance,
- Does not contain toxic substances after curing,
- It has high tensile and abrasion resistance,
- Its thermal resistance is excellent, the product never softens,
- Resistant to cold: The film retains its elasticity down to -40°C.
- Even if the CREATOP 500 2K is damaged in any way, the damaged part can be easily repaired in a short time,
- Although it does not require thinning, CREAGENT RA-11 can be used depending on the conditions.

TECHNICAL PROPERTIES	
Density	1,05 - 1,10 gr/cm^3
Hardness	50 (Shore A)
Viscosity	200-400 Cp
Water Vapor Permeability	0,8 gr/m^2 hour
Adhesion to Concrete	>2 (N/mm^2)
Tensile Strength	>10 (N/mm^2) - (+23^{0}C)
Elongation	≥ %50
Curing Time	4 - 6 hour
Recoat Time	24 hour

NOTE: The technical specifications written above are based on the test results at 23°C and 50% relative humidity. Values may vary under different temperature and humidity conditions.

APPLICATION METHOD

Application :

Apply the material in one or two coats with a roller brush or airless sprayer.

Consumption :

150- 250 g/m² for each coat

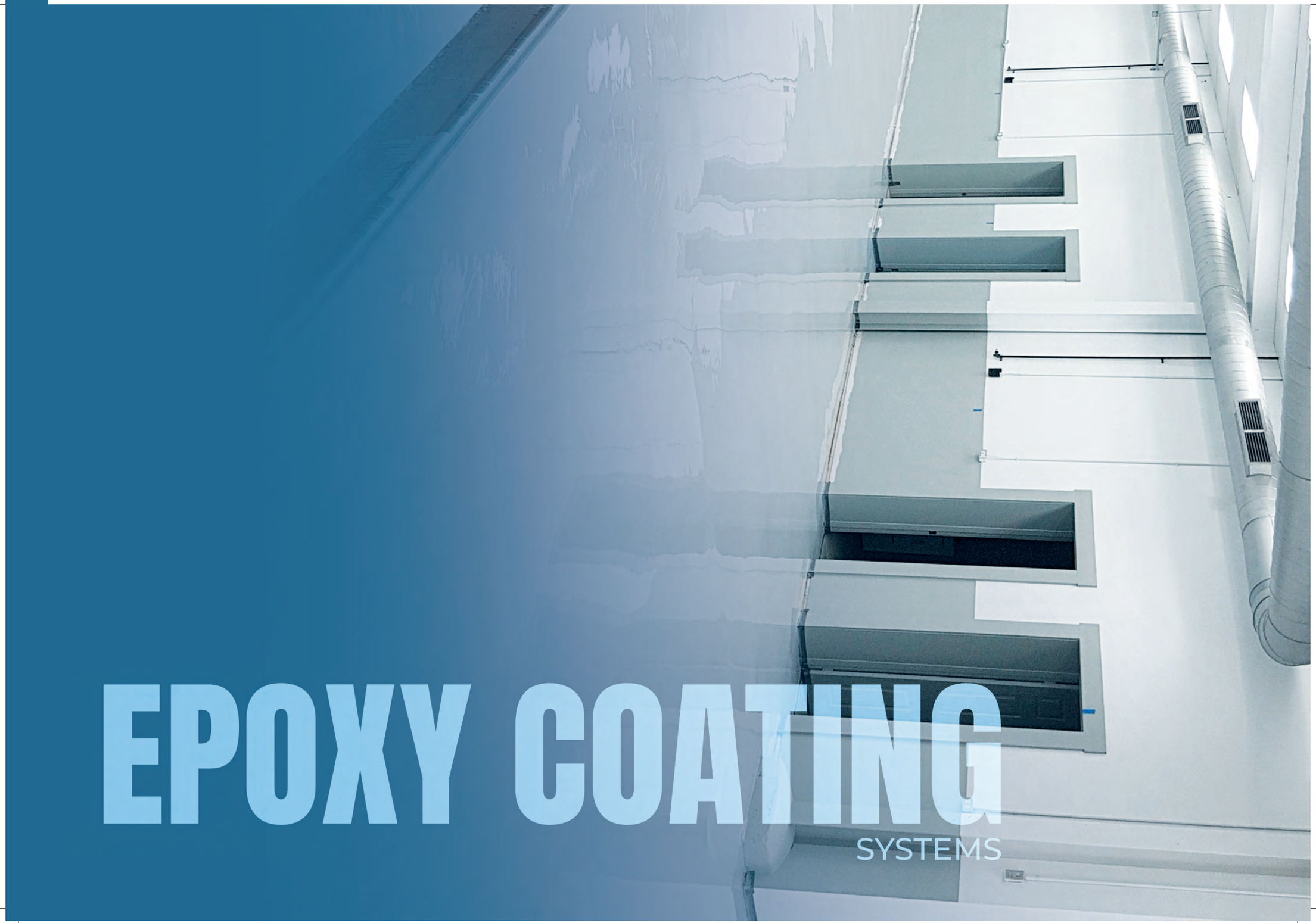
STORAGE	PACKACING
It should be stored in its unopened original package, in a cool and dry environment at a temperature between + 5°C and + 25°C, protected from frost and sunlight	0,750 kg + 0,250 kg, 3 kg + 1 kg, 15 kg + 5 kg special metal buckets.

NOTICE REGARDING SAFETY AND USAGE

During the application, flammable, combustible and flammable products should be kept away. No smoking. Care should be taken to ensure that the application area is constantly ventilated. Protective equipment such as goggles and gloves should be used during the application. In case of eye contact, rinse thoroughly with plenty of water. For detailed information, please request the Material Safety Data Sheet. It should be kept out of reach of children. The product should be consumed by professional users, taking into account the data in the technical information section.

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EPOXY COATING

SYSTEMS

CREACASE EP TIX

EPOXY ORANGE PATTERN COATING

GENERAL DESCRIPTION

Creacase EP TIX is an epoxy resin based, two component, solvent free, orange peel patterned topcoat epoxy material.

APPLICATIONS AREAS

- Maintenance workshops, garages
- Multi-storey and underground parking lots
- Maintenance hangars
- Beverage and food industry floors
- Hobby areas

GENERAL PROPERTIES

- High chemical and mechanical resistance
- Easy to apply
- Glossy finish
- A high percentage of filling can be entered
- Liquid impermeable.

NOTE: The above technical specifications were tested at 23°C and 50% relative humidity. according to the result. Values may vary under different temperature and humidity conditions.

REACTION CHARACTERISTICS			
CONTROL CHARACTERISTIC	UNIT	VALUE	TEST METHOD
Exact lifetime	day	7	23°C ve % 50 relative humidity (RH)
Recoat time	hour	8-12	23°C ve % 50 relative humidity (RH)
Light traffic	hour	12-24	23°C ve % 50 relative humidity (RH)
Pot life (+10C)	min	80	-
Pot life (+25C)	min	30-35	-

PHYSICAL AND MECHANICAL PROPERTIES OF PRODUCTS			
PARAMETER	UNIT	VALUE	TEST METHOD
Density (A+B)	gr/cm³	1,55 ±0,05	ISO 845
Adhesion to concrete surface	N/mm²	>1,5	ASTM D 4542
Solid substance	%	100	-
Colour	-	Ral color	-
Application temperature	°C	Between +5 °C and +35 °C	-
Hardness	Shore D	75 – 80	7 days after

PROCESS CONDITIONS

Surface preparation:

Primer: Ensure that a continuous, non-porous coat covers the surface. Apply two coats of primer if necessary. Creacase EPNT 150 or EPNT 250 can be applied by brush, roller or trowel. The preferred application is to use a roller and go over the surface with a roller.

Leveling Mortar: Rough surfaces must first be leveled. As leveling mortar Use Creacase EPNT 150 or EPNT 250 as mortar (see Product Data Sheet).

Preparation of the mixture:

The product is two-component and it is recommended to mix the amount to be consumed considering the pot life of the mixture. Excess mixtures will become unusable after the potlife period is over. For a homogeneous mixture, the product temperature should be +15°C and above. Component A should be mixed in its own package with the help of a mixer with an average speed of 300 rpm for about 2-3 minutes. Afterwards should be added into the hardener (component B). Mix until A and B components are homogeneous.

Application:

When mixing and applying, wear rubber gloves and goggles to protect your skin and eyes from exposure. Do not add any foreign substance and water into the product. Since the product will harden immediately when mixed in extremely hot weather, it should be mixed as much as it will be consumed. Do not apply if the temperature is below +5°C.

Usage and Consumption:

It is applied to the surface after primer and intermediate layer application. The surface is scanned by giving a pattern with a coral roller. Due to its consistency, the orange peel pattern will be provided with a coral roller after application.

STORAGE	SHELF LIFE	PACKAGING
Materials should be stored in cool, dry and closed areas.	Shelf life for components A and B is 1 year, provided proper storage in the original unopened packaging.	18 kg (A)+ 2 kg (B) in special metal packages

NOTICE REGARDING SAFETY AND USAGE

Flammable, combustible and flammable products should be kept away during application. Smoking should be avoided. Care should be taken to ensure continuous ventilation of the application area. Protective equipment such as goggles and gloves should be used during application. In case of eye contact, wash thoroughly with plenty of water. Request Material Safety Data Sheet for detailed information. Keep out of the reach of children. The product should be consumed by professional users, taking into account the data in the technical information section.

Material safety data sheet (MSDS) will be provided to you by your FLOKSER CHEMISTRY sales representative during product supply. It is recommended that you read this form carefully before handling and using the product and review your own handling, safety and usage conditions. It is recommended that you dispose of the finished product containers according to the disposal method in this form.

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CREACASE EP SELF

EPOXY SELF LEVELING COATING

GENERAL DESCRIPTION

Creacase EP SELF, epoxy resin based, two-component, solvent-free, self-contained is a spreading top coat epoxy material.

APPLICATION AREAS

- Storage and assembly areas,
- Maintenance workshops, garages,
- Multi-storey and underground parking lots,
- Maintenance hangars,
- Beverage and food industry floors ,
- Hobby areas.

GENERAL PROPERTIES

- High chemical and mechanical resistance .
- Easy to apply.
- Glossy finish.
- A high percentage of filling can be entered.
- Liquid impermeable.

NOTE: The above technical specifications were tested at 23°C and 50% relative humidity. according to the result. Values may vary under different temperature and humidity conditions.

PHYSICAL AND CHEMICAL PROPERTIES OF COMPONENTS

PARAMETER	UNIT	CREACASE EPX FM A	CREACASE EPX FM B	TEST METHOD
Density (25°C)	g/cm³	1.75-1.85	1.40-1.45	DIN 51757
Viscosity (25°C)	mPa.s	-	8000-10000	ASTM D 4878

REACTION CHARACTERISTICS

CONTROL CHARACTERISTIC	UNIT	VALUE	TEST METHOD
Exact lifetime	day	7	23°C ve % 50 relative humidity (RH)
Recoat time	hour	8-12	23°C ve % 50 relative humidity (RH)
Light traffic	hour	12-24	23°C ve % 50 relative humidity (RH)
Pot life (+10C)	min	80	-
Pot life (+25C)	min	30-35	-

PHYSICAL AND MECHANICAL PROPERTIES OF PRODUCTS

PARAMETER	UNIT	VALUE	TEST METHOD
Density (A+B)	gr/cm³	1,45 ±0,05	ISO 845
Adhesion to concrete surface	N/mm²	>1,5	ASTM D 4542
Solid substance	%	100	-
Colour	-	Ral color	-
Application temperature	°C	Between +5 °C and +35 °C	-
Hardness	Shore D	75 – 80	7 days after

PROCESS CONDITIONS

Surface preparation :

Primer: Ensure that a continuous, non-porous coat covers the surface. Apply two coats of primer if necessary. Can be applied by brush, roller or roller. Preferred application gelber is to use a roller and go over it with a roller.

Flat wear coat: Epoxy self-poured onto the surface, spread with a notched trowel. After spreading the material evenly on the surface, the top coat is combed in X and Y directions with the help of a spiked roller. is obtained.

Preparation of the mixture :

The product is two-component and it is recommended to mix the amount to be consumed considering the pot life of the mixture. Excess mixtures will become unusable after the potlife period is over. For a homogeneous mixture, the product temperature should be +15°C and above. Component A should be mixed in its own package with the help of a mixer with an average speed of 300 rpm for about 2-3 minutes. Afterwards should be added into the hardener (component B). Mix until A and B components are homogeneous.

Application :

When mixing and applying, wear rubber gloves and goggles to protect your skin and eyes from exposure. Do not add any foreign substance and water into the product. Since the product will harden immediately when mixed in extremely hot weather, it should be mixed as much as it will be consumed. Do not apply if the temperature is below +5°C.

Usage and Consumption :

The following values are theoretically calculated and do not include the need for additional material depending on surface condition, profile, leveling differences and loss.

- When ~0,3-0,5 kg/m² paint application is made
- ~1.1-1.4 kg/m²/mm when used as a self-leveling wear coat

STORAGE	SHELF LIFE	PACKAGING
Materials should be stored in cool, dry and closed areas.	Shelf life for components A and B is 1 year, provided proper storage in the original unopened packaging.	16kg (A)+ 4 kg (B) in special metal packages

NOTICE REGARDING SAFETY AND USAGE

Flammable, combustible and flammable products should be kept away during application. Smoking should be avoided. Care should be taken to ensure continuous ventilation of the application area. Protective equipment such as goggles and gloves should be used during application. In case of eye contact, wash thoroughly with plenty of water. Request Material Safety Data Sheet for detailed information. Keep out of the reach of children. The product should be consumed by professional users, taking into account the data in the technical information section.

Material safety data sheet (MSDS) will be provided to you by your FLOKSER CHEMISTRY sales representative during product supply. It is recommended that you read this form carefully before handling and using the product and review your own handling, safety and usage conditions. It is recommended that you dispose of the finished product containers according to the disposal method in this form.

FLOKSER CHEMISTRY has adopted the principle of protecting human health and the environment during the production and application of its products. Therefore, it is always ready to help and support its customers in this regard. Please contact your FLOKSER CHEMISTRY sales representative when you need it.



REPAIR, MORTAR

AND REINFORCEMENT SYSTEMS

CREACASE EPX FM

TWO COMPONENT EPOXY REPAIR MORTAR

GENERAL DESCRIPTION

Creacase EPX FM is a two-component high-strength epoxy-based repair mortar with thixotropic consistency, specially developed for bonding and repairing PVC, TPE, dilatation membranes for overhead and horizontal use material.

APPLICATION AREAS

- Bonding of dilatation tapes to concrete,
- Repair and bonding of all kinds of materials such as concrete, stone, marble,
- It is used for bonding materials such as tiles and granite to glossy surfaces.

GENERAL PROPERTIES

- It is a very easy material to apply.
- Impermeable to water and gas.
- Resistant against chemicals and abrasion.
- Excellent adherence to concrete.
- Does not shrink.
- Does not contain solvent.
- Cannot be thinned with thinner.

PHYSICAL AND CHEMICAL PROPERTIES OF COMPONENTS

PARAMETER	UNIT	CREACASE EPX FM A	CREACASE EPX FM B	TEST METHOD
Density (25°C)	g/cm³	1.75-1.85	1.40-1.45	DIN 51757
Viscosity (25°C)	mPa.s	-	8000-10000	ASTM D 4878

REACTION CHARACTERISTICS

CONTROL CHARACTERISTIC	UNIT	VALUE	TEST METHOD
Exact lifetime	day	7	23°C and % 50 relative humidity (RH)

PHYSICAL AND MECHANICAL PROPERTIES OF PRODUCTS

PARAMETER	UNIT	VALUE	TEST METHOD
Density (A+B)	gr/cm³	1,80	ISO 845
Adhesion to concrete surface	N/mm²	>3,5	ASTM D 4542
Solid substance	%	100	-
Colour	-	Grey	-
Application temperature	°C	Between +5 °C and +35 °C	-

NOTE: The above technical specifications were tested at 23°C and 50% relative humidity. according to the result. Values may vary under different temperature and humidity conditions.

PROCESS CONDITIONS:

Surface preparation:

The application surface must be dry and free from all dust, dirt, weak and loose particles, cement grout molds, oil and grease. The concrete subfloor must be solid and have sufficient compressive strength (at least 25N/mm²) and tensile strength (pulloff) (at least 1,5N/mm²).

Preparation of the mixture:

The product is two-component and it is recommended to mix the amount to be consumed considering the pot life of the mixture. Excessive mixtures will affect the potlife period. will become unusable after it is finished. After component B is added to component A, a low 2-3 minutes (300rpm) with a fast, electric mixer until a homogeneous color is obtained must be mixed.

Application:

When mixing and applying, use rubber gloves and work goggles to protect your skin and eyes from being affected. Do not add any foreign substance and water into the product. Since the product will harden immediately when mixed in extremely hot weather, it should be mixed as much as it will be consumed. Do not apply if the temperature is below +5°C.

Consumption:

For two coats depending on concrete surface, workmanship, dilatation band size 1.00 kg/m3 when requested is.

STORAGE	PACKAGING
Materials should be stored in cool, dry and closed areas.	3,75 kg (A) + 1,25 kg (B) in special metal packages.

NOTICE REGARDING SAFETY AND USAGE

Flammable, combustible and flammable products should be kept away during application. Smoking should be avoided. Care should be taken to ensure continuous ventilation of the application area. Protective equipment such as goggles and gloves should be used during application. In case of eye contact, wash thoroughly with plenty of water. Request Material Safety Data Sheet for detailed information. Keep out of the reach of children. The product should be consumed by professional users, taking into account the data in the technical information section.

Material safety data sheet (MSDS) will be provided to you by your FLOKSER CHEMISTRY sales representative during product supply. It is recommended that you read this form carefully before handling and using the product and review your own handling, safety and usage conditions. It is recommended that you dispose of the finished product containers according to the disposal method in this form.

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CREACASE DLB

TAPE ADHESIVE

GENERAL DESCRIPTION

CREACASE DLB, is a two component, solvent free, high performance epoxy based assembly adhesive. It has a thixotropic consistency specially developed for adhering PVC, TPE, dilatation membranes to dilatation in vertical and horizontal uses, and is used in bonding and repair works.

APPLICATION AREAS

- Adhering dilation tapes to concrete,
- In the repair and bonding of all kinds of materials such as concrete, stone, marble,
- Bonding of materials such as tiles, granites,
- It is used for bonding metal profiles and steel flats to concrete.

GENERAL PROPERTIES

- Easy to apply
- Water and gas impermeable
- Resistant to chemicals and abrasion
- Excellent adhesion to concrete
- No shrinkage
- Solvent free
- It cannot be diluted with thinner.

TECHNICAL PROPERTIES				
	Unit	Creacase DLB A	Creacase DLB B	Test method
Density (25°C)	g/cm^3	1,60±0,05	1,60±0,05	DIN 51757
Appearance	-	Cream	Black	Internal Method
Components		Epoxy Resin	Hardener	
	Unit	Value	Test method	
Pot life	min	25 - 35	Internal Method	
Full Drying Time	day	7	Internal Method	
Adhesion Strength (Concrete surface)	Mpa	>3	ASTM D 4541	
Adhesion Strength (Steel surface)	Mpa	>3,5	ASTM D 4541	

COMPONENT RATIOS		
	Unit	Value
Creacase DLB A	by weight	100
Creacase DLB B	by weight	25

PROCESS CONDITIONS

Surface preparation :

The application surface must be dry and free from all kinds of dust, dirt, weak and loose particles, cement grout residues, oil and grease. The concrete subfloor must have a strong and sufficient compressive strength (minimum 25 N/mm²) and pull-off (minimum 1.5 N/mm²) strength.

Mixing :

The product is two-component and it is recommended to mix the amount to be consumed, taking into account the pot life of the mixture. Excess mixtures will become unusable after the pot life expires. After adding component B to component A, it should be mixed with a low speed electric mixer for 2-3 minutes (300 rpm) until a homogeneous color is obtained.

Application :

While mixing and applying, use rubber gloves and goggles to protect your skin and eyes from being affected. Do not add any foreign substance or water to the product. In extremely hot weather, when the product is mixed, it will harden immediately, so the mixture should be made to be consumed. It should not be applied if the temperature is below +5°C.

Consumption : Depending on the concrete surface, workmanship and dilatation band size, the consumption is 2 kg/m³ when requested for two coats.

STORAGE	SHELF LIFE	PACKING
It should be stored in original unopened containers in a dry and cool place at temperatures between 5-25°C. Legal requirements for storage must be observed.	When stored in accordance with storage conditions, the shelf life is as follows. CREACASE DLB A : 12 months CREACASE DLB B : 12 months	CREACASE DLB is available in the following packaging units: **Metal Box** : CREACASE DLBA - 4kg CREACASE DLBB - 1kg

NOTICE REGARDING SAFETY AND USAGE

During the application, flammable, combustible and flammable products should be kept away. No smoking. Care should be taken to ensure that the application area is constantly ventilated. Protective equipment such as goggles and gloves should be used during the application. In case of eye contact, rinse thoroughly with plenty of water. For detailed information, please request the Material Safety Data Sheet. It should be kept out of reach of children. The product should be consumed by professional users, taking into account the data in the technical information section.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

FLOKSER CHEMISTRY commits protecting human health and the environment during the production conditions and customer conditions. So FLOKSER KİMYA is always ready to help its customers in this regard. Please contact to your FLOKSER KİMYA representative when you need help.

BINDER



CREANATE 110 - 07

COLD BULK BINDER

PRODUCT DESCRIPTION

CREANATE 110-07 is a solvent-free, single component, moisture curing polyurethane based binder system. Suitable for industrial rubber coatings and sports pitches.

USAGE AREAS

- Sports fields
- Running tracks and walkways
- Children's playgrounds
- Adhesion of concrete, metal and PVC

GENERAL PROPERTIES

- Easy to apply
- Solvent free
- It has excellent adhesion strength
- Excellent resistance to outdoor conditions
- It does not lose its strength at low and high temperatures
- Resistant to chemicals
- Resistant to humidity

TECHNICAL PROPERTIES	
Chemical structure	MDI based prepolymer
Color	Yellow- Amber
Viscosity (25°C)	4000 ± 500
Density (25°C)	1,1 ± 0,1
NCO (%)	8,75 ± 0,25
Solid	99%±1
First drying time	min 12 hour
Full drying and mechanical durability	7 day
Amount of use (bulk) SBR	SBR %80-85, Binder %15-20
Amount of use (bulk) EPDM	EPDM %80-85, Binder %15-20

APPLICATION METHOD

Application :

In pouring applications; To bind EPDM rubber, SBR rubber, rasp granules in high efficiency; the granules should be thoroughly cleaned from chemical oils, dust and soil. Binder is added to the mixer with SBR rubber at rates of 15-20%. PU binder is applied to the previously cleaned surface and binder and rubber mixture is poured, properly spread with the help of paver or trowel. After final touches to obtain a uniform surface it is left to dry.

STORAGE	SHELF LIFE	PACKAGING
Creanate 110-07 is sensitive to moisture and should therefore be stored in sealed packages.	Creanate 110-07 can be stored for 6 months in its original sealed packaging at approximately 25°C. Storage at high temperatures causes increase in viscosity and shorten the shelf life.	Available in 220 kg metal drums.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER CHEMISTRY sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREANATE 110 - 15

COLD BULK RUBBER MATTRESS BINDER

PRODUCT DESCRIPTION

CREANATE 110-15 is a solvent-free, one-component, moisture-curing polyurethane-based binder system. It is suitable for industrial rubber coatings and sports fields.

USAGE AREAS

- Sports fields,
- Hiking, jogging trails,
- Children's playgrounds,
- Bonding wood, metal, concrete and PVC,

GENERAL PROPERTIES

- Easy to apply.
- Solvent free.
- It has excellent adhesion strength.
- Resistant to weather conditions and moisture.
- Does not lose their strength at low and high temperatures.
- Resistant to chemicals.
- Water resistant.

TECHNICAL PROPERTIES	
Chemical structure	MDI based polyurethane binder
Color	Yellow-brown
Viscosity (25°C)	4700 ± 500
Density (21°C)	1,1 ± 0,1
NCO%	10,00 ± 0,20
Initial drying time	Min. 10 hours
Full drying and mechanical durability	7 Day
Usage amount (bulk) SBR	SBR %80 - 85, Binder %15 - 20
Usage amount (bulk) EPDM	EPDM %80 - 85, Binder %15 - 20

APPLICATION METHOD

Application :

In pouring applications, in order to bind EPDM rubber, SBR rubber, blast granules together with high efficiency, the granules must be clean, free from chemical oils, dust and soil. For mixing, SBR or EPDM rubber and a binder of 15-20% are added to the mixer. A mixture of binder and rubber is poured onto the previously cleaned surface, on which the PU binder primer application has been made, and it is spread evenly with the help of a paver or trowel. Final arrangements are made by hand and left to dry.

STORAGE	SHELF LIFE	PACKAGING
Creanate 110-15 is sensitive to moisture and should therefore be stored in closed packages.	Creanate 110-15 can be stored for 6 months in its original sealed package at approximately 25 °C. High temperature storage causes viscosity increase and shortens shelf life.	Available in 220 kg drums.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER CHEMISTRY sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREANATE 110 - 20

COLD BULK CROSSLINK POLYETHYLENE BINDER

PRODUCT DESCRIPTION

CREANATE 110-20 is a solvent-free, single component, moisture curing polyurethane based binder system. Suitable for industrial rubber coatings and sports pitches.

USAGE AREAS

- Sports fields
- Running tracks and walkways
- Children's playgrounds
- Adhesion of concrete, metal and PVC

GENERAL PROPERTIES

- Easy to apply
- Solvent free
- It has excellent adhesion strength
- Excellent resistance to outdoor conditions
- It does not lose its strength at low and high temperatures
- Resistant to chemicals
- Resistant to humidity

TECHNICAL PROPERTIES	
Chemical structure	MDI based prepolymer
Color	Yellow- Amber
Viscosity (25°C)	6000 ± 500
Density (25°C)	1,1 ± 0,1
NCO%	9,00 ± 0,2
Solid	99%±1
First drying time	min 10 hour
Full drying and mechanical durability	7 day
Amount of use (bulk) SBR	SBR %80-85, Binder %15-20
Amount of use (bulk) EPDM	EPDM %80-85, Binder %15-20

APPLICATION METHOD

Application :

In pouring applications; To bind EPDM rubber, SBR rubber, rasp granules in high efficiency; the granules should be thoroughly cleaned from chemical oils, dust and soil. Binder is added to the mixer with SBR rubber at rates of 15-20%. PU binder is applied to the previously cleaned surface and binder and rubber mixture is poured, properly spread with the help of paver or trowel. After final touches to obtain a uniform surface it is left to dry.

STORAGE	SHELF LIFE	PACKAGING
CREANATE 110-20 is sensitive to moisture and should therefore be stored in sealed packages.	CREANATE 110-20 can be stored for 6 months in its original sealed packaging at approximately 25°C. Storage at high temperatures causes increase in viscosity and shorten the shelf life.	Available in 220 kg metal drums.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER CHEMISTRY sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREANATE 110 - 12

EYELASH SPONGE BINDER

PRODUCT DESCRIPTION

CREANATE 110-12 is a solvent-free, one-component, moisture-curing polyurethane-based binder system. It is used for bonding clipped sponges in press applications.

USAGE AREAS

- It is used in clipped sponges used in sound insulation systems,
- Blocks recycled sponge pieces

GENERAL PROPERTIES

- Easy to apply
- Solvent free
- It has excellent adhesion strength
- Resistant to weather conditions and moisture
- Does not lose their strength at low and high temperatures
- Resistant to chemicals
- Water resistant

TECHNICAL PROPERTIES	
Chemical structure	MDI based polyurethane binder
Color	Yellow-brown
Viscosity (25°C)	2400 ± 500
Density (21°C)	1,1 ± 0,1
NCO%	10,25 ± 0,25

APPLICATION METHOD

Application :

A homogeneous mixture is achieved by adding 10% of the product to clean and same-sized clipped sponges. High temperature application and hot steam accelerate curing.

STORAGE	SHELF LIFE	PACKAGING
Creanate 110-12 is sensitive to moisture and should therefore be stored in closed packages.	Creanate 110-12 can be stored for 6 months in its original sealed package at approximately 25 °C. High temperature storage causes viscosity increase and shortens shelf life.	Available in 220 kg drums.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER CHEMISTRY sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREANATE 110 - 10

HOT PRESS BINDER

PRODUCT DESCRIPTION

CREANATE 110-10 is a one componenet, moisture cure, solvent free polyurethane based press binder which is used for bonding rubber granules at moulding systems. CREANATE 110-10 is formulated for use with recycled rubber granules to manufacture Rubber Mats or Tiles in moulding systems.

USAGE AREAS

- Rubber tiles,
- Rubber flooring systems,
- Adhesion of concrete, metal and PVC,
- Adhesion of wood material,
- Adhesion of rubber, gasket, cork seals.

GENERAL PROPERTIES

- Easy to apply
- Solvent free
- It has excellent adhesion strength
- Excellent resistance to outdoor conditions
- It does not lose its strength at low and high temperatures. (0°C. up to 70°C)
- Humidity and chemicals are durable

TECHNICAL PROPERTIES	
Chemical	MDI based prepolimer
Color	Yellow, Brown
Viscosity	6000 ± 500
Density	1,1 ± 0,1
NCO%	9,5 ± 0,5
Open time	5 - 25 min
Application tempereature	120 - 170 ^{0}C

APPLICATION METHOD

Application :

Creanate 110-10 is mixed with dry EPDM or SBR granules % 4- 7 ratio. . The mixing time in the mixer after having added the binder to the rubber granules should be 3-5 minutes depending on the quantity being mixed. The mixture should be prepared and mixed in a clean and dry mechanical mixer until a homogenous mixture is obtained. Molds are normally heated between 120-170°C and pressure time may vary between 5 to 25.

STORAGE	SHELF LİFE	PACKING
CREANATE 110-10 must be stored in sealed containers at 15-25° C.	Shelf life is 6 months from the production date in appropiate conditions	220 kgs metal drums.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER CHEMISTRY sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

FLOKSER CHEMISTRY commits protecting human health and the environment during the production conditions and customer conditions. So FLOKSER CHEMISTRY is always ready to help its customers in this regard. Please contact to your FLOKSER CHEMISTRY representative when you need help.

Wear suitable protective clothing, gloves and eye face protection. Adequate ventilation of the working area is recommended. Avoid breathing vapors. Avoid contact with skin and eyes.

CREANATE 110 - 10 A

HOT PRESS BINDER

PRODUCT DESCRIPTION

CREANATE 110-10A is a one componenet, moisture cure, solvent free polyurethane based press binder which is used for bonding rubber granules at moulding systems. CREANATE 110-10 A is formulated for use with recycled rubber granules to manufacture Rubber Mats or Tiles in moulding systems.

USAGE AREAS

- Rubber tiles,
- Rubber flooring systems,
- Adhesion of concrete, metal and PVC,
- Adhesion of wood material,
- Adhesion of rubber, gasket, cork seals.

GENERAL PROPERTIES

- Easy to apply
- Solvent free
- It has excellent adhesion strength
- Excellent resistance to outdoor conditions
- It does not lose its strength at low and high temperatures. (0°C. up to 70°C)
- Humidity and chemicals are durable

TECHNICAL PROPERTIES	
Chemical	MDI based prepolimer
Color	Yellow, Brown
Viscosity	7000 ± 500
Density	1,1 ± 0,1
NCO%	9,5 ± 0,5
Open time	5 - 25 min
Application tempereature	120 - 170 ^{0}C

APPLICATION METHOD

Application

Creanate 110-10 A is mixed with dry EPDM or SBR granules % 4- 7 ratio. . The mixing time in the mixer after having added the binder to the rubber granules should be 3-5 minutes depending on the quantity being mixed. The mixture should be prepared and mixed in a clean and dry mechanical mixer until a homogenous mixture is obtained. Molds are normally heated between 120-170°C and pressure time may vary between 5 to 25.

STORAGE	SHELF LİFE	PACKING
CREANATE 110-10 A must be stored in sealed containers at 15-25° C.	Shelf life is 6 months from the production date in appropiate conditions	220 kgs metal drums.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER CHEMISTRY sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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Wear suitable protective clothing, gloves and eye face protection. Adequate ventilation of the working area is recommended. Avoid breathing vapors. Avoid contact with skin and eyes.

CREACASE ADH 2K

2K POLYURETHANE ADHESIVE

PRODUCT DESCRIPTION

CREACASE ADH 2K, is a two-component, elastic, polyurethane-based adhesive.

USAGE AREAS

- Industrial rubber coatings
- In all kinds of parquet bonding processes
- Bonding of artificial turf sports ground applications
- Metal, ceramic, concrete, wood, etc. Applicable in bonding processes

GENERAL PROPERTIES

- Excellent adhesion to the applied surface
- Suitable for use even in bad weather conditions
- Resistant to thermal stresses
- Long service life
- Flexible
- Solvent free

TECHNICAL PROPERTIES	
Density	1,80 ± 0,05 gr/cm^3
Mixing ratio (A+B)	9:1
Pot-life	60 mins
Application temperature	+5°C- +30°C
Service temperature	-15°C to +80°C
Fully cured	7 days

APPLICATION METHOD

Surface preparation :

All surfaces must be sound, dry and clean. The surface must be free of weak and loose particles that reduce adherence, and any oil, grease, rust and paraffin residues. If there is water flow on the surface, it should be drained or closed with a suitable plug. Steel surfaces should be cleaned of rust by sandblasting and new reinforcement should be made if necessary.

Preparation of the mixture :

CREACASE ADH 2K is supplied in ready-to-use sets according to 2K mixing ratio. Before starting the mixture, it should be ensured that the material temperatures are between +15°C and +25°C for the best results. All of Component B should be poured into Component A and it should be ensured that there is no material left in the container of Component B. A suitable mixer (~300 rpm) should be used for mixing. CREACASE ADH 2K should be mixed for at least 3 minutes until a homogeneous mixture is obtained.

Sarfiyat :

1.2 kg /m² for 1 mm thickness

STORAGE	SHELF LIFE	PACKAGING
They should be stored in unopened original packaging in dry environments at temperatures between 5°C and 25°C. The material in the opened bucket should be used as soon as possible.	It can be stored for a minimum of 12 months in unopened original packages in dry environments at temperatures between 5°C and 25°C.	18 kg (A) comp. 2 kg (B) comp. sold in special metal packaging

NOTICE REGARDING SAFETY AND USAGE

During the application, flammable, combustible and flammable products should be kept away. No smoking. Care should be taken to ensure that the application area is constantly ventilated. Protective equipment such as goggles and gloves should be used during the application. In case of eye contact, rinse thoroughly with plenty of water. For detailed information, please request the Material Safety Data Sheet. It should be kept out of reach of children. The product should be consumed by professional users, taking into account the data in the technical information section.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER CHEMISTRY sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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INJECTION

SYSTEMS

CREAINJECT 90

PRODUCT DESCRIPTION

CREAINJECT 90 is a one-component, solvent-free, polyurethane injection mortar ideal for crack injection / water stains in concrete and masonry structures. Reaction with water creates a semi-rigid polyurethane foam.

USAGE AREAS

- To stop water leaks in underground structures, to fill gaps containing water.
- Crack injection in concrete and masonry structures
- It can be used in a wide variety of structures such as tunnels and highways, HEPP and Dam projects, concrete pavements, underground galleries and foundations..

GENERAL PROPERTIES

- Resin and catalyst components can be mixed before injection and used as a single component.
- After injection, it reacts with water and the carbon dioxide gas (CO2) formed allows the foam to swell and penetrate into the cracks.
- Polyurethane foam has a semi-rigid structure.
- Easily adaptable by varying the reaction rate, the accelerator or catalyst content is between 6 and 10%.

TECHNICAL PROPERTIES			
Physical Properties	**Unit**	**Creainject 90**	**Creainject 90 Cat**
Components		Isocyanate pre-polymer	Catalyst
Viscosity (25°C)	cP	20 - 50	0 - 50
Density (25°C)	g/cm^3	1,1 - 1,12	0,85 - 1,00
Appearance	-	Brown, liquid	Transparent, liquid

REACTION CHARACTERISTICS		
Catalyst Amount (%)	**Reaction start time (sn)**	**Reaction end time (sn)**
6	16	75
8	12	58
10	8	45

Reaction times in 5% aqueous medium. (At 20 ° C) Free expansion: 4000% of the initial volume.

Mechanical Properties	Unit	Test method	Value
Foam Density	kg/m^3	ASTM D 1622	14 ± 4
Compressive Strength	KPa	ISO 844	>10
Tensile Strength	MPa	ASTM D 638	>45
Elongation at Break	%	ASTM D 638	>15
E-Modulus	MPa	ASTM D 638	>450

The data indicated are laboratory measurements. These values may differ in applications due to temperature, humidity, pressure and other factors between the resin and application site.

PROCESS CONDITIONS

Surface preparation :

Cracks to be applied should be cleaned with compressed air, and cleaned from substances such as oil and paint.

Mixing :

The catalyst is thoroughly shaken. The resin and catalyst are mixed at a rate of 6% to 10%, depending on the desired reaction rate.

Application :

For injection: Packer and single component pump are used. The mixture swells and fills the void by reacting with the moisture/water in the ground or crack. If the ground or crack is dry, water should be injected into the hole where the injection will be made beforehand.

STORAGE	SHELF LIFE	PACKING
CREAINJECT 90 should be protected from humidity and temperature variability. Therefore, the materials will be kept ambient temperature should be between 10 °C and 30 °C. The opened cans should be closed again using dry nitrogen and stored in a moisture-free environment.	Shelf life is 6 months from the date of production when stored in its original package in a ventilated, dry and protected environment at + 100C / + 300C, protected from sun, rain and frost.	CREAINJECT 90 - 25 kg Plastic - 220 kg Barrel - 1000 kg IBC CREAINJECT 90 CAT - 2,5 kg - 5 kg - 25 kg

NOTICE REGARDING SAFETY AND USAGE

Adequate safety precautions should be taken before opening, dispersing, mixing, pouring or emptying drums. When using the product, it should comply with appropriate safety and hygiene rules. Containers can be dangerous when empty and should be disposed of in accordance with local regulations.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREAINJECT 95

PRODUCT DESCRIPTION

CREAINJECT 95 is a one-component, solvent-free, polyurethane injection mortar ideal for crack injection / water stains in concrete and masonry structures. Reaction with water creates a semi-rigid polyurethane foam.

USAGE AREAS

- To stop water leaks in underground structures, to fill gaps containing water.
- Crack injection in concrete and masonry structures
- It can be used in a wide variety of structures such as tunnels and highways, HEPP and Dam projects, concrete pavements, underground galleries and foundations.

GENERAL PROPERTIES

- Resin and catalyst components can be mixed before injection and used as a single component.
- After injection, it reacts with water and the carbon dioxide gas (CO2) formed allows the foam to swell and penetrate into the cracks.
- Polyurethane foam has a semi-rigid structure.

TECHNICAL PROPERTIES			
Physical Properties	**Unit**	**Creainject 95**	**Creainject 95 Cat**
Components		Isocyanate pre-polymer	Catalyst
Viscosity (25°C)	mPa.s	20 - 50	0 - 50
Density (25°C)	g/cm^3	1,1 - 1,12	0,85 - 1,00
Appearance	-	Brown, liquid	Transparent, liquid

REACTION CHARACTERISTICS		
Catalyst Amount (%)	**Reaction start time (sec)**	**Reaction end time (sec)**
10	8	45

Reaction times in 5% aqueous medium. (At 20 ° C) Free expansion: 4000% of the initial volume.

Mechanical Properties	Unit	Test method	Value
Foam Density	kg/m^3	ASTM D 1622	14 ± 4
Compressive Strength	KPa	ISO 844	>10
Tensile Strength	MPa	ASTM D 638	>45
Elongation at Break	%	ASTM D 638	>15
E-Modulus	MPa	ASTM D 638	>450

The data indicated are laboratory measurements. These values may differ in applications due to temperature, humidity, pressure and other factors between the resin and application site.

PROCESS CONDITIONS

Surface preparation :

Cracks to be applied should be cleaned with compressed air, and cleaned from substances such as oil and paint.

Mixing :

The catalyst is thoroughly shaken. Resin and catalyst are mixed at a rate of 10 %.

Application :

For injection: Packer and single component pump are used. The mixture swells and fills the void by reacting with the moisture/water in the ground or crack. If the ground or crack is dry, water should be injected into the hole where the injection will be made beforehand.

STORAGE	SHELF LIFE	PACKING
CREAINJECT 95 should be protected from humidity and temperature variability. Therefore, the materials will be kept ambient temperature should be between 10 °C and 30 °C. The opened cans should be closed again using dry nitrogen and stored in a moisture-free environment.	Shelf life is 6 months from the date of production when stored in its original package in a ventilated, dry and protected environment at + 100C / + 300C, protected from sun, rain and frost.	CREAINJECT 95 - 25 kg Plastic - 220 kg Barrel - 1000 kg IBC CREAINJECT 95 - 2,5 kg CAT - 5 kg - 25 kg

NOTICE REGARDING SAFETY AND USAGE

Adequate safety precautions should be taken before opening, dispersing, mixing, pouring or emptying drums. When using the product, it should comply with appropriate safety and hygiene rules. Containers can be dangerous when empty and should be disposed of in accordance with local regulations.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREAINJECT 400

PRODUCT DESCRIPTION

CREAINJECT 400 is a two-component, CFC and halogen-free, fast-reacting polyurethane ground injection product that provides sealing especially against pressurized water in water-carrying zone.

USAGE AREAS

- It is used to permanently stop high-volume water inlets in underground structures and to provide ground consolidation.
- Sealing of water currents from mountains, rocks, dams.
- Securing the pillar/support transition.
- Rehabilitation and sealing of tunnels, channels, wet shafts.
- Consolidation in wet or water-carrying mountains.
- Consolidation of foundations.
- Other special applications.

GENERAL PROPERTIES

- Suitable for deep injection
- Solvent free
- CFC and halogen free
- In contact with water, the product forms a rigid foam. In
- contact with water, the reaction is completed in a very short time.
- Even in areas with high (50% by volume) water leakage and in places where there is no water, the product reacts and expands to form a hard foam.
- Sealing works immediately.
- The resin is very stable chemically.
- Penetrates crack widths over 0.1 mm.
- Only one working day is required for permanent sealing.
- It expands in volume with the effect of external water.

TECHNICAL PROPERTIES			
Physical Properties	**Unit**	**Creainject 400 A**	**Creainject 400 B**
Components		Polyol	Isocyanate
Viscosity (25°C)	mPa.s	350 ± 100	200 ± 40
Density (25°C)	g/cm^3	1,00 ± 0,02	1,23 ± 0,02
Appearance	-	Light yellow	Red-Brown
Mixing Ratio (By Weight)	by weight	85	100

MECHANICAL PROPERTIES				
	Unit	**Test method**	**Without Contact With Water**	**In Contact With 1% Water**
Foam Density	kg/m^3	ASTM D 1622	430 ± 40	55 ± 5
Adhesion Strength	MPa	ASTM D 4541	>2,0	>2,0
Compressive Strength	MPa	ISO 844	>7,0	>0,2
Tensile strength	MPa	ASTM D 638	>6,6	>0,3
E-Modulus	MPa	ASTM D 638	>300	>5,0
Elongation at break	%	ASTM D 638	>9,0	>44
Hardness	Shore D	ASTM D 2240	>80	>22

REACTION CHARACTERISTICS				
	Unit	Without Contact With Water	In Contact With 1% Water	In contact With 50 % Water
Comp. Temperatures	°C	25	25	25
Reaction Start Time	sec	15 - 25	15 - 25	20 - 30
Reaction End Time	sec	30 - 40	30 - 40	200 - 240
Foaming Factor	-	1 - 2	10 - 12	10 - 12

The data indicated are laboratory measurements. These values may differ in applications due to heat exchange between the resin and application site, humidity, pressure and other factors.

PROCESS CONDITIONS

Mixing:

CREAINJECT 400 is a two component polyurethane based injection resin. Components should be used in the mixing ratios specified in the Technical Data sheet

Uygulama :

IMPORTANT: Shake component A before use (barrels can be rolled).

CREAINJECT 400 A and CREAINJECT 400 B components should be injected into the previously drilled borehole, the gap to be repaired, the crack or the area where it will be applied, by means of a two-component pump with a static mixer at a volumetric ratio of 1:1. When in contact with water, the resin forms a waterproof structure in the form of rigid foam. To reach the recommended processing temperature between 15 °C and 30 °C, we recommend storing products at a minimum temperature of 15 °C for at least 12 hours before processing.

STORAGE	SHELF LIFE	PACKING		
After opening the packaging of the product components and using it, the packaging should be tightly closed again and the materials should be consumed in a short time. It should be stored in original unopened containers in a dry and cool place at temperatures between 5-35 °C. When the product has cooled to low temperatures, it must be reheated to a minimum of 15°C before use. Component A is sensitive to frostbite. Legal requirements for storage must be observed.	CREAINJECT 400 A : 12 months	CREAINJECT 400 A	Plastic Drum	23 kg
			Barrel	212,5 kg
	CREAINJECT 400 B : 12 months	CREAINJECT 400 B	Plastic Drum	27 kg
			Barrel	250 kg

NOTICE REGARDING SAFETY AND USAGE

Adequate safety precautions should be taken before opening, dispersing, mixing, pouring or emptying drums. When using the product, it should comply with appropriate safety and hygiene rules. Containers can be dangerous when empty and should be disposed of in accordance with local regulations.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREAINJECT 500

PRODUCT DESCRIPTION

CREAINJECT 500 is a two-component, CFC and halogen-free, fast-reacting polyurethane ground injection product that provides sealing especially against pressurized water in water-carrying zone.

USAGE AREAS

- It is used to permanently stop high-volume water inlets in underground structures and to provide ground consolidation.
- Sealing of water currents from mountains, rocks, dams.
- Securing the pillar/support transition.
- Rehabilitation and sealing of tunnels, channels, wet shafts.
- Consolidation in wet or water-carrying mountains.
- Consolidation of foundations.
- Other special applications.

GENERAL PROPERTIES

- Suitable for deep injection
- Solvent free
- CFC and halogen free
- In contact with water, the product forms a rigid foam. In
- contact with water, the reaction is completed in a very short time.
- Even in areas with low (1 % by volume) water leakage and in places where there is no water, the product reacts and expands to form a hard foam.
- Sealing works immediately.
- The resin is very stable chemically.
- Penetrates crack widths over 0.1 mm.
- Only one working day is required for permanent sealing.
- It expands in volume with the effect of external water.

TECHNICAL PROPERTIES

Physical Properties	Unit	Creainject 500 A	Creainject 500 B
Components		Polyol	Isocyanate
Viscosity (25°C)	mPa.s	350 ± 100	200 ± 40
Density (25°C)	g/cm^3	1,00 ± 0,02	1,23 ± 0,02
Appearance	-	Light yellow	Red-Brown
Component Ratios	by weight	85	100

MECHANICAL PROPERTIES

	Unit	Test method	Without Contact With Water	In Contact With 1% Water
Foam Density	kg/m^3	ASTM D 1622	500 ± 40	65 ± 5
Adhesion Strength	MPa	ASTM D 4541	>4,0	>2,0
Compressive Strength	MPa	ISO 844	>3,3	>0,3
Tensile strength	MPa	ASTM D 638	>5,5	>0,4
E-Modulus	MPa	ASTM D 638	>300	>5,4
Elongation at break	%	ASTM D 638	>25	>57
Hardness	Shore D	ASTM D 2240	>80	>30

REACTION CHARACTERISTICS			
	Unit	Without Contact With Water	In Contact With 1% Water
Comp. Temperatures	°C	25	25
Reaction start time	sec	60 - 100	60 - 100
Reaction end time	sec	140 - 200	180 - 240
Foaming Factor	-	1,0 - 1,5	8 - 10

The data indicated are laboratory measurements. These values may differ in applications due to heat exchange between the resin and application site, humidity, pressure and other factors.

PROCESS CONDITIONS

Mixing :

CREAINJECT 500 is a two component polyurethane based injection resin. Components should be used in the mixing ratios specified in the Technical Data sheet

Application :

IMPORTANT: Shake component A before use (barrels can be rolled).

CREAINJECT 500 A and CREAINJECT 500 B components should be injected into the previously drilled borehole, the gap to be repaired, the crack or the area where it will be applied, by means of a two-component pump with a static mixer at a volumetric ratio of 1:1. When in contact with water, the resin forms a waterproof structure in the form of rigid foam. To reach the recommended processing temperature between 15 °C and 30 °C, we recommend storing products at a minimum temperature of 15 °C for at least 12 hours before processing.

STORAGE	SHELF LIFE	PACKING		
After opening the packaging of the product components and using it, the packaging should be tightly closed again and the materials should be consumed in a short time. It should be stored in original unopened containers in a dry and cool place at temperatures between 5-35 °C. When the product has cooled to low temperatures, it must be reheated to a minimum of 15°C before use. Component A is sensitive to frostbite. Legal requirements for storage must be observed.	CREAINJECT 500 A : 12 months	CREAINJECT 500 A	Plastic Drum	23 kg
			Barrel	212,5 kg
	CREAINJECT 500 B : 12 months	CREAINJECT 500 B	Plastic Drum	27 kg
			Barrel	250 kg

NOTICE REGARDING SAFETY AND USAGE

Adequate safety precautions should be taken before opening, dispersing, mixing, pouring or emptying drums. When using the product, it should comply with appropriate safety and hygiene rules. Containers can be dangerous when empty and should be disposed of in accordance with local regulations.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREANATE INJECT 53

PRODUCT DESCRIPTION

CREANATE INJECT 53 is a solvent free (solvent free) low viscosity polyurethane injection resin for ground stabilization. It is a material that is harmless to the environment and resistant to biological effects.

USAGE AREAS

- Where waterproofing is required.
- In filling and repair works.
- Crack injections.
- In places exposed to movement in concrete structures and in dilatations to stop water leaks.
- In tunnels, bridges and all building elements.
- Stopping water leaks at the junctions of tunnel segments, injecting curtain wall behind segments.
- Sandy ground, pre-injection into cracked rocks.
- Stabilization of sandy and gravelly soils.

GENERAL PROPERTIES

- It is hydrophobic.
- It reacts in contact with water, expands and cures and turns into a non-porous, flexible and dense foam.
- Provides absolute water impermeability.
- It has high adhesion strength even in humid environments.
- Resistant to mild acids, alkalis, organic solutions, fungi, mold and micro-organisms.
- Reaction and expansion rate can be controlled.
- There is no harm to health if it comes into contact with drinking water.

TECHNICAL PROPERTIES			
Physical Properties	**Unit**	**Creanate Inject 53**	**Creacat Inject 53**
Components		Isocyanate	Catalyst
Viscosity (25°C)	mPa.s	5 - 50	2 - 20
Density (25°C)	g/cm^3	1,08 - 1,12	0,85 - 1,00
Appearance	-	Brown, liquid	Transparent, liquid

REACTION CHARACTERISTICS	
Catalyst Amount (%)	**Reaction start time (min.)**
0,5	9 - 11
1	5 - 6
2	2 - 3
4	1 - 2

PROCESS CONDITIONS

Surface preparation :

Cracks to be applied should be cleaned with compressed air, and cleaned from substances such as oil and paint.

Mixing :

- CREANATE INJECT 53 and 0.5-1-2% CREACAT INJECT 53 according to the desired reaction time are added by shaking and mixed until a homogeneous mixture is obtained.
- The accelerator ratio should be determined by pre-testing, taking into account the ambient temperature, humidity and water temperature.
- During mixing, the resin should be kept away from water, otherwise it will react and start to freeze in the equipment and cause clogging.
- As long as the mixture does not come into contact with water, it does not react.

Application :

- CREANATE INJECT 53 polyurethane injection is a one-component, solvent-free, soil stabilization system with ideal polymer compatibility. The formation of new generation carbon dioxide gas increased the viscosity of the material even more and the resin was allowed to penetrate very well on fine grained sandy soils.
- CREANATE INJECT 53 + CREACAT INJECT 53 mixture is injected with a single component and pressure injection pump.
- The injected material reacts with the water in the environment and stops the water by curing. When it reacts with water, it takes the form of a very rigid polyurethane and penetrates very well into hydrophobic, that is, water-saturated soil layers and chemically impermeable conglomerate-type floors.
- It reaches very excellent compressive strength values in a very short time without shrinking or swelling.

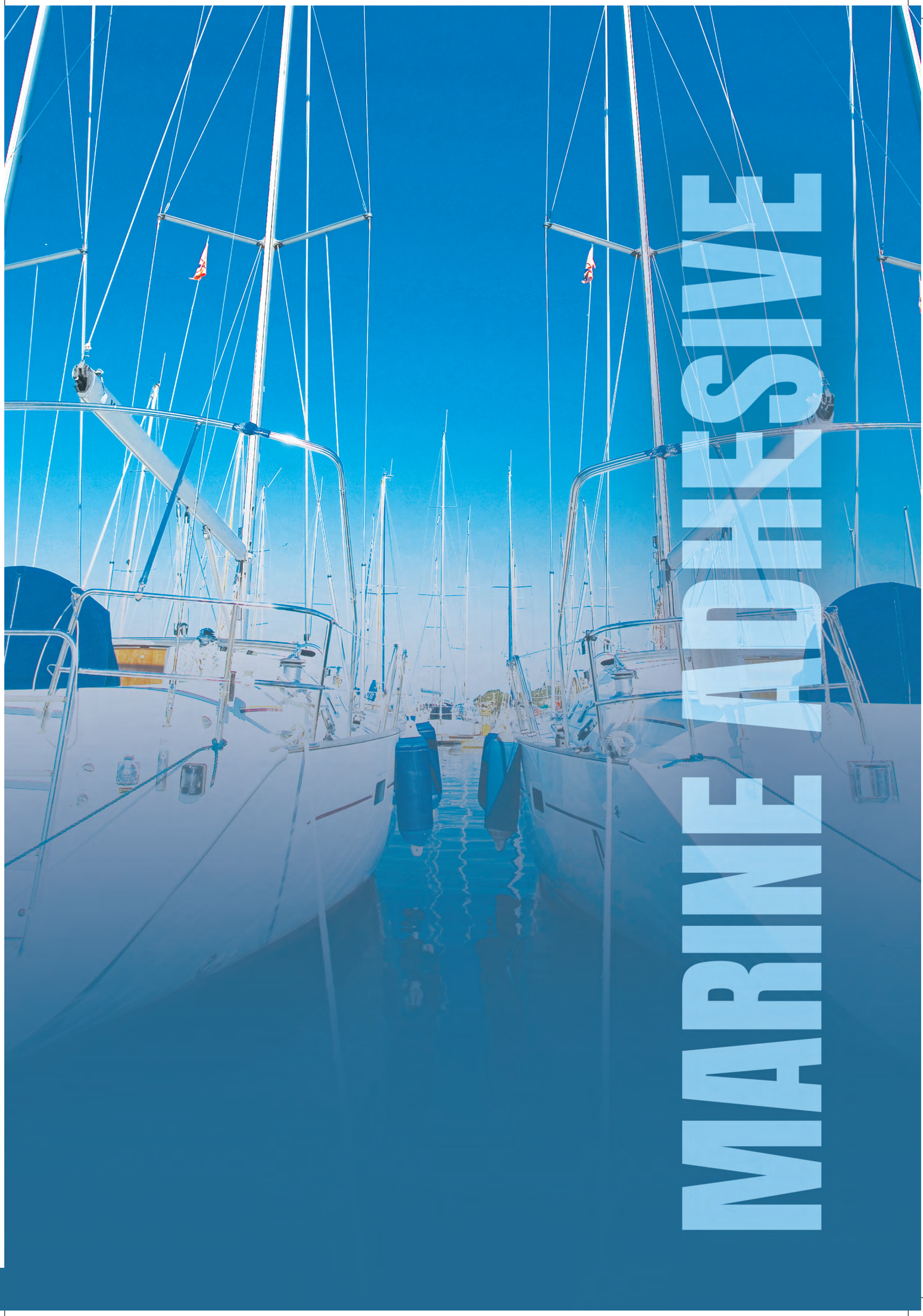
STORAGE	SHELF LIFE	PACKING
CREANATE INJECT 53, CREACAT INJECT 53 should be protected from humidity and temperature variability. Therefore, the materials will be kept ambient temperature should be between 10 °C and 30 °C. The opened cans should be closed again using dry nitrogen and stored in a moisture-free environment.	Shelf life is 6 months from the date of production when stored in its original package in a ventilated, dry and protected environment at + 100C / + 300C, protected from sun, rain and frost.	CREANATE INJECT 53 - 25 kg plastic - 220 kg Barrel - 1000 kg IBC CREACAT INJECT 53 - 0,5 kg - 5 kg - 25 kg

NOTICE REGARDING SAFETY AND USAGE

Adequate safety precautions should be taken before opening, dispersing, mixing, pouring or emptying drums. When using the product, it should comply with appropriate safety and hygiene rules. Containers can be dangerous when empty and should be disposed of in accordance with local regulations.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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MARINE ADHESIVE

CREADHESIVE CA - 01

PRODUCT DESCRIPTION

CREADHESIVE CA 01 is a one component polyurethane based wood and decoration adhesive. It cures with the help of moisture in the environment and in the wood.

USAGE AREAS

- Bonding of many materials such as wood, metal, concrete, polyurethane, polystyrene foam.
- In the manufacture of furniture and yachts
- In boat manufacturing
- It can be used in bonding processes where water resistance is required.

GENERAL PROPERTIES

- Dries fast
- Water resistant (D4-DIN EN 204)
- It can be used on slightly damp surfaces.
- Does not lose its strength at low and high temperatures
- Resistant to moisture and chemicals
- It has excellent adhesion strength.

APPLICATION

Do not use at temperatures below 5°C. The parts to be bonded must be properly cleaned, free of dust and oil. For strong adhesion, at least one of the surfaces must be porous. The adhesive should be applied as a thin layer on one or both surfaces. Surfaces should be pressed within 15 minutes. The sheets should remain pressed for at least 1 hour. The newly applied adhesive can be cleaned with acetone.

IMPORTANT

-Since the adhesive dries with the help of moisture in the air, the shelf life may be shortened after the product is opened. Therefore, it should be ensured that the packaging is tightly closed after

-Storage above +35 °C and below -10 °C may shorten the shelf life.

Pressing time; It depends on the humidity and temperature of the environment and how porous (absorbency) the materials to be bonded are.

SECURITY

Unhealthy. Contains diphenylmethane -4.4 diisocyanate. Irritating to eyes, respiratory organs and skin. May be harmful if inhaled. It should not be used in insufficiently ventilated environments. Wear protective clothing and gloves while working. Do not stay away from children.

TECHNICAL PROPERTIES	
Components	Isocyanate pre-polymer
Color	Red-Brown
Density (25°C)	1,10g/ml ± 0,01
Viscosity (25°C)	5000 -10000
Shelling time	30 ± 5 min
Consumption Amount	150 - 250 ml/m^2
Pressing/curing time	Min. 2 hour
Application temperature	5-35

STORAGE
Shelf life is 12 months if stored in its original sealed package under suitable conditions.

CREADHESIVE CA 04

PRODUCT DESCRIPTION

CREADHESIVE CA 04 is a one component polyurethane based wood and decoration adhesive. It cures with the help of moisture in the environment and in the wood.

USAGE AREAS

- Bonding of many materials such as wood, metal, concrete, polyurethane, polystyrene foam.
- In the manufacture of furniture and yachts
- In boat manufacturing
- It can be used in bonding processes where water resistance is required.

GENERAL PROPERTIES

- Dries fast
- Water resistant (D4-DIN EN 204)
- It can be used on slightly damp surfaces.
- Does not lose its strength at low and high temperatures
- Resistant to moisture and chemicals
- It has excellent adhesion strength.

TECHNICAL PROPERTIES	
Components	Isocyanate pre-polymer
Color	Red-Brown
Density (25°C)	1,125 ± 0,25 g/cm^3
Viscosity (25°C)	5.000 -10.000
Shelling time	20 ± 5 min
Consumption Amount	150 - 250 ml/m^2
Pressing/curing time	Min. 1 hour
Application temperature	5^0 C'den 35^0 C'ye

APPLICATION METHOD

Do not use at temperatures below 5°C. The parts to be bonded must be properly cleaned, free of dust and oil. For strong adhesion, at least one of the surfaces must be porous. The adhesive should be applied as a thin layer on one or both surfaces.

Surfaces should be pressed within 15 minutes. Pressing time; It depends on the humidity and temperature of the environment and how porous (absorbency) the materials to be bonded are.

The sheets should remain pressed for at least 1 hour. The newly applied adhesive can be cleaned with acetone.

STORAGE	SHELF LIFE
Since the adhesive dries with the help of moisture in the air, the shelf life may be shortened after the product is opened. Therefore, it should be ensured that the packaging is tightly closed after use. Storage above +35 °C and below -10 °C may shorten the shelf life.	Shelf life is 12 months if stored in its original sealed package under suitable conditions.

NOTICE REGARDING SAFETY AND USAGE

Adequate safety precautions should be taken before opening, dispersing, mixing, pouring or emptying drums. When using the product, it should comply with appropriate safety and hygiene rules. Containers can be dangerous when empty and should be disposed of in accordance with local regulations.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREADHESIVE CA 06

PRODUCT DESCRIPTION

CREADHESIVE CA 06 is a one component polyurethane based wood and decoration adhesive. It cures with the help of moisture in the environment and in the wood.

USAGE AREAS

- Bonding of many materials such as wood, metal, concrete, polyurethane, polystyrene foam.
- In the manufacture of furniture and yachts,
- In boat manufacturing,
- It can be used in bonding processes where water resistance is required.

GENERAL PROPERTIES

- Dries fast
- Water resistant (D4-DIN EN 204)
- It can be used on slightly damp surfaces.
- Does not lose its strength at low and high temperatures
- Resistant to moisture and chemicals
- It has excellent adhesion strength.

TECHNICAL PROPERTIES	
Components	Poliüretan Prepolimer
Color	Şeffaf - Açık Sarı
Density (25°C)	1,11 ± 0,03 g/cm^3
Viscosity (25°C)	1.000 -4.000
Shelling time	15 ± 5 min
Consumption Amount	150 - 250 ml/m^2
Pressing/curing time	Min. 30 min
Application temperature	5°C -35°C

PROCESS CONDITIONS

Before applying, for information about precautionary measures and safety recommendations, please read the Material Safety Data Sheet. Also, always follow the relevant precautions for chemical products exempt from mandatory labeling. Please refer to local safety instructions.

Application

Do not use at temperatures below 5°C. The parts to be bonded must be properly cleaned, free of dust and oil. For strong adhesion, at least one of the surfaces must be porous. The adhesive should be applied as a thin layer on one or both surfaces.

Surfaces should be pressed within 15 minutes. Pressing time; It depends on the humidity and temperature of the environment and how porous (absorbency) the materials to be bonded are.

The sheets should remain pressed for at least 1 hour. The newly applied adhesive can be cleaned with acetone.

STORAGE	SHELF LIFE
Since the adhesive dries with the help of moisture in the air, the shelf life may be shortened after the product is opened. Therefore, it should be ensured that the packaging is tightly closed after use. Storage above +35 oC and below -10 oC may shorten the shelf life.	Shelf life is 12 months if stored in its original sealed package under suitable conditions.

NOTICE REGARDING SAFETY AND USAGE

Adequate safety precautions should be taken before opening, dispersing, mixing, pouring or emptying drums. When using the product, it should comply with appropriate safety and hygiene rules. Containers can be dangerous when empty and should be disposed of in accordance with local regulations.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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PACKAGING

ADHESIVE

CREAFLEX FP2202 & CREAPOL FP2141

GENERAL DESCRIPTION

CREAFLEX FP 2202 / CREAPOL FP 2141 is a solvent-free two-component lamination adhesive. This product is low viscosity standard performance laminating adhesive.

APPLICATION AREAS

- CREAFLEX FP 2202/CREAPOL FP 2141 is a solvent-free adhesive combination which is suitable for the lamination of transparent films and metalized films for food packaging.

GENERAL PROPERTIES

- Does not contain solvent.
- Provides good adhesion to various films.
- It consists of two components.
- Creates a polyurethane structure with chemical reaction.
- The completely cured adhesive film is transparent, odorless, elastic and age-resistant.

TECHNICAL PROPERTIES			
Parameter	**Unit**	**Creaflex FP - 2202**	**Creapol FP - 2141**
Solid Content	%	99 ± 1	99 ± 1
Viskozite (25^0 C, Brookfield) LTV, Sp 2, 30rpm)	mPa.s	1300 ± 300	700 ± 200
Density (25°C)	g/cm^3	1,17 ± 0,02	0,96 ± 0,01
Appearance	-	Yellowish to reddish-yellow	Clear to yellowish to reddish-yellow
Component Ratios	kg	100	85

MIXTURE PROFILE	
Viscosity after 15 minutes	~ 700 cps
Viscosity after 30 minutes	~ 1500 cps
Viscosity after 60 minutes	~ 4500 cps

PROCESS CONDITIONS

Before applying, for information about precautionary measures and safety recommendations, please read the Material Safety Data Sheet. Also, always follow the relevant precautions for chemical products exempt from mandatory labeling. Please refer to local safety instructions.

Application :

CREAFLEX FP 2202/CREAPOL FP 2141 can be applied with on special laminating machines with multi-roller application system. Components should be used in the mixing ratios specified in the Technical Data Sheet.

Application Weight :

The application weight may range from 1.0 to 3 g/m² dry depending on the film or foil combination and the intended use of the laminate. For printed laminates the weight has to be adjusted to higher weight accordingly. It should be approx. 0,5 g/m² higher than for unprinted films.

STORAGE
After opening the packaging of the product components and using it, the packaging should be tightly closed again and the materials should be consumed in a short time. It should be stored in original unopened containers in a dry and cool place.

SHELF LIFE
CREAFLEX FP 2202 : 9 months
CREAPOL FP 2141 : 12 months

WORK CONDITIONS
Precise web tension control together with a suitable winding program avoids tunneling as well as telescoping and curing effects.

CLEANING
In case of a machine stop (for more than 20 minutes) the coating unit has to be cleaned with solvents/ plasticizer mixture. The 2 component dosing unit has to be cleaned. The same cleaning procedure has to follow at the end of the run.

CURING
Manufacture of triplex laminates is possible 24 hours after duplex production. Complete curing will be achieved after 7 days of storage at room temperature depending on film combination and intended use of the laminates.

FILM REQUIREMENTS
Practical laminating tests as well as checks on the laminates are necessary before going into full scale production. The deep draw properties of film/film laminates have to be checked since oriented films (OPA, OPP) show a tendency to tunnelling upon the influence of higher temperatures.

PROTECTIVE MEASURES
CREAFLEX FP 2202 / CREAPOL CREAPOL FP 2141 contains polyisocyanates. To avoid the emission of volatile Isocyanates into the working area, the coating unit has to be equipped with an air-supplied hood. This will make sure that the TLV-value (max concentration in air) does not exceed limit. Safety regulations with regard to handling of Isocyanates have to be followed as per the guidelines issued by the International Isocyanate Institute.

NOTICE REGARDING SAFETY AND USAGE

Adequate safety precautions should be taken before opening, dispersing, mixing, pouring or emptying drums. When using the product, it should comply with appropriate safety and hygiene rules. Containers can be dangerous when empty and should be disposed of in accordance with local regulations.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

FLOKSER CHEMISTRY commits protecting human health and the environment during the production conditions and customer conditions. So FLOKSER KİMYA is always ready to help its customers in this regard. Please contact to your FLOKSER KİMYA representative when you need help.

CREAFLEX FP2204 & CREAPOL FP2141

GENERAL DESCRIPTION

CREAFLEX FP 2204 / CREAPOL FP 2141 is a solvent-free two-component lamination adhesive. This product is standard performance.

APPLICATION AREAS

- CREAFLEX FP 2204/CREAPOL FP 2141 is a solvent-free adhesive combination which is suitable for the lamination of transparent films and metalized films for food packaging.

GENERAL PROPERTIES

- Does not contain solvent.
- Provides good adhesion to various films.
- It consists of two components.
- Creates a polyurethane structure with chemical reaction.
- The completely cured adhesive film is transparent, odorless, elastic and age-resistant.

TECHNICAL PROPERTIES			
Parameter	**Unit**	**Creaflex FP - 2204**	**Creapol FP - 2141**
Solid Content	%	99 ± 1	99 ± 1
Viskozite (40⁰ C, Brookfield) LTV, Sp 2, 30rpm)	mPa.s	3000 ± 1500	-
Viskozite (20⁰ C, Brookfield) LTV, Sp 2, 30rpm)	mPa.s	-	700 ± 200
Density (25°C)	g/cm^3	1,15 ± 0,05	0,96 ± 0,01
Appearance	-	Yellowish to reddish-yellow	Clear to yellowish to reddish-yellow
Component Ratios	kg	100	75

MIXTURE PROFILE	
Viskozite (40⁰ C), sp:3	1250 cps
Viscosity after 15 minutes	~ 2800 cps
Viscosity after 30 minutes	~ 6700 cps

PROCESS CONDITIONS

Before applying, for information about precautionary measures and safety recommendations, please read the Material Safety Data Sheet. Also, always follow the relevant precautions for chemical products exempt from mandatory labeling. Please refer to local safety instructions.

Application :

CREAFLEX FP 2204/CREAPOL FP 2141 can be applied with on special laminating machines with multi-roller application system. Components should be used in the mixing ratios specified in the Technical Data Sheet.

Application Weight :

The application weight may range from 1.0 to 3 g/m² dry depending on the film or foil combination and the intended use of the laminate. For printed laminates the weight has to be adjusted to higher weight accordingly. It should be approx. 0,5 g/m² higher than for unprinted films.

STORAGE
After opening the packaging of the product components and using it, the packaging should be tightly closed again and the materials should be consumed in a short time. It should be stored in original unopened containers in a dry and cool place.

SHELF LIFE
CREAFLEX FP 2204 : 9 months
CREAPOL FP 2141 : 12 months

WORK CONDITIONS
Precise web tension control together with a suitable winding program avoids tunneling as well as telescoping and curing effects.

CLEANING
In case of a machine stop (for more than 20 minutes) the coating unit has to be cleaned with solvents/ plasticizer mixture. The 2 component dosing unit has to be cleaned. The same cleaning procedure has to follow at the end of the run.

CURING
Manufacture of triplex laminates is possible 24 hours after duplex production. Complete curing will be achieved after 7 days of storage at room temperature depending on film combination and intended use of the laminates.

FILM REQUIREMENTS
Practical laminating tests as well as checks on the laminates are necessary before going into full scale production. The deep draw properties of film/film laminates have to be checked since oriented films (OPA, OPP) show a tendency to tunnelling upon the influence of higher temperatures.

PROTECTIVE MEASURES
CREAFLEX FP 2204 / CREAPOL FP 2141 contains polyisocyanates. To avoid the emission of volatile Isocyanates into the working area, the coating unit has to be equipped with an air-supplied hood. This will make sure that the TLV-value (max concentration in air) does not exceed limit. Safety regulations with regard to handling of Isocyanates have to be followed as per the guidelines issued by the International Isocyanate Institute.

NOTICE REGARDING SAFETY AND USAGE

Adequate safety precautions should be taken before opening, dispersing, mixing, pouring or emptying drums. When using the product, it should comply with appropriate safety and hygiene rules. Containers can be dangerous when empty and should be disposed of in accordance with local regulations.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREAFLEX FP2208 & CREAPOL FP2148

GENERAL DESCRIPTION

CREAFLEX FP 2208 / CREAPOL FP 2148 i is a solvent-free two-component lamination adhesive. This product is medium to high performance and resistant to boiling.

APPLICATIONS AREAS

- CREAFLEX FP 2208 / CREAPOL FP 2148 is a solvent-free adhesive combination suitable for lamination of transparent films and metallized films and foils for food packaging.

GENERAL PROPERTIES

- Does not contain solvent.
- Provides good adhesion to various films.
- It consists of two components.
- Creates a polyurethane structure with chemical reaction.
- The completely cured adhesive film is transparent, odorless, elastic and age-resistant.

TECHNICAL PROPERTIES			
Parameter	**Unit**	**Creaflex FP - 2208**	**Creapol FP - 2148**
Solid Content	%	99 ± 1	99 ± 1
Viskozite (40⁰ C, Brookfield) LTV, Sp 2, 30rpm)	mPa.s	4400 ± 1750	-
Viskozite (20⁰ C, Brookfield) LTV, Sp 2, 30rpm)	mPa.s	-	750 ± 250
Density (25°C)	g/cm^3	1,15 ± 0,05	1 ± 0,05
Appearance	-	Yellowish to reddish-yellow	Clear to yellowish to reddish-yellow
Component Ratios	kg	100	45

MIXTURE PROFILE	
Viskozite (40⁰ C), sp:3	1400 cps
Viscosity after 30 minutes	~ 4000 cps
Viscosity after 60 minutes	~ 10500 cps

PROCESS CONDITIONS:

Before applying, for information about precautionary measures and safety recommendations, please read the Material Safety Data Sheet. Also, always follow the relevant precautions for chemical products exempt from mandatory labeling. Please refer to local safety instructions.

Application :

CREAFLEX FP 2208 / CREAPOL FP 2148 can be applied with on special laminating machines with multi-roller application system. Components should be used in the mixing ratios specified in the Technical Data Sheet.

Application Weight :

The application weight may range from 1.0 to 3 g/m² dry depending on the film or foil combination and the intended use of the laminate. For printed laminates the weight has to be adjusted to higher weight accordingly. It should be approx. 1 to 2 g/m² higher than for unprinted films.

STORAGE
After opening the packaging of the product components and using it, the packaging should be tightly closed again and the materials should be consumed in a short time. It should be stored in original unopened containers in a dry and cool place.

SHELF LIFE
CREAFLEX FP 2208 : 9 months
CREAPOL FP 2148 : 12 months

WORK CONDITIONS
Precise web tension control together with a suitable winding program avoids tunneling as well as telescoping and curing effects.

CLEANING
In case of a machine stop (for more than 30 minutes) the coating unit has to be cleaned with solvents/ plasticizer mixture. The 2 component dosing unit has to be cleaned. The same cleaning procedure has to follow at the end of the run.

CURING
Manufacture of triplex laminates is possible 24 hours after duplex production. Complete curing will be achieved after 7 days of storage at room temperature depending on film combination and intended use of the laminates.

FILM REQUIREMENTS
Practical laminating tests as well as checks on the laminates are necessary before going into full scale production. The deep draw properties of film/film laminates have to be checked since oriented films (OPA, OPP) show a tendency to tunnelling upon the influence of higher temperatures.

PROTECTIVE MEASURES
CREAFLEX FP 2208 / CREAPOL FP 2148 contains polyisocyanates. To avoid the emission of volatile Isocyanates into the working area, the coating unit has to be equipped with an air-supplied hood. This will make sure that the TLV-value (max concentration in air) does not exceed limit. Safety regulations with regard to handling of Isocyanates have to be followed as per the guidelines issued by the International Isocyanate Institute.

NOTICE REGARDING SAFETY AND USAGE

Adequate safety precautions should be taken before opening, dispersing, mixing, pouring or emptying drums. When using the product, it should comply with appropriate safety and hygiene rules. Containers can be dangerous when empty and should be disposed of in accordance with local regulations.

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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HEAT INSULATION

SPRAY SYSTEMS

CREAPOL RS 2323 - 08

PRODUCT DESCRIPTION

is a polyol system used in spray applications that do not require mechanical strength, such as roof application. Semi-rigid, open cell, waterblown polyurethane foam according to EN14315-1:2013. The application rate is 1:1 by volume. Due to its low density, it provides a consumption advantage.

APPLICATIONS AREAS

- Insulation of Buildings
- Insulation of Houses
- Industrial Buildings
- Farm Buildings

GENERAL PROPERTIES

- Fast curing
- Open cell
- Sound absorption
- Higher yield
- Consumption advantage
- Corrosion resistance
- Abrasion resistance
- Eco friendly

Polymix : Creapol RS 2323 - 08 **Isocyanate :** Creanate PMDI 6136

TECHNICAL PROPERTIES				
	Unit	Creapol RS 2323 - 08	Creanate 6136	Test method
Density (21°C)	g/cm^3	1.06 - 1.10	1.20 - 1.25	ASTM D 4052
Viscosity (25°C)	cP	150 - 400	210 - 250	ASTM D 4878
NCO Number	%	-	30,5 - 31	ASTM D 5155
	Unit	Value	Test method	
Component Temperature	^{0}c	21^{0}c		
Cream Time	second	3 ± 1	Internal Method	
Gel Time	second	6 ± 2	Internal Method	
Tack Free Time	second	8 ± 3	Internal Method	
Free Rise Density	kg/m^3	8 ± 1	EN 1602	
Compressive Strength	kPa	>20	EN 826	
Closed Cell Content	%	<20	ISO 4590	
Thermal Conductivity	W/m.K	<0,038	EN 12667	

PROCESS CONDITIONS

CREAPOL RS2323/08 must be processed using designated two component spray machines only. These machines should have a mixing ratio of 100:100 in parts by volume. The transport hoses should be set at a temperature of 30 – 50°C, depending on ambient conditions. It is necessary to use a component (mixing) pressure of at least 60 bar. Usually this requires a machine setting of 90 – 115 bar. Pressure difference between the two components should never exceed 15 bar. CREAPOL RS 2323/08 can be applied in layers of max. 50 mm. Higher foam thicknesses should be obtained by applying multiple layers. Before application the processor should check the condition of the substrate. Dust, water or grease should be removed prior to application. Take special care for dew formation of the substrate under certain climatic conditions. (dewpoint determination), dewpoint should be 3°C lower than substrate temperature. When in doubt test the adhesion of the foam onto the substrate. The substrate temperature should be at least 5°C. Ambient and humidity can have a significant influence on the EN14315-1:2013 performance of the product. Drums CREAPOL RS 2323/08 should be mixed well before use.

STORAGE	SHELF LIFE	PACKAGING
Product components are sensitive to moisture. So they must be stored in the original sealed drums at storage temperature. Polyol component must be mixed before use.	CREAPOL RS 2323-08 can be stored for 6 months at approximately 25 oC in its closed package. High temperature storage causes shortening of shelf life.	CREAPOL RS 2323-08 is packaged in 200 kg drums. Creanate 6136 is packaged in 250 kg drums.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREAPOL RS 2320 - 18

PRODUCT DESCRIPTION

2320/18 is a polyol system used in spray applications that do not require mechanical strength, such as roof application. Semi-rigid, open cell, waterblown polyurethane foam according to EN14315-1:2013. The application rate is 1:1 by volume. Due to its low density, it provides a consumption advantage.

APPLICATIONS AREAS

- Insulation of Buildings
- Insulation of Houses
- Industrial Buildings
- Farm Buildings

GENERAL PROPERTIES

- Fast curing
- Open cell
- Sound absorption
- Higher yield
- Consumption advantage
- Corrosion resistance
- Abrasion resistance
- Eco friendly

Polimiks : Creapol RS 2320 - 18 **İzosiyanat :** Creanate PMDI 6136

TECHNICAL PROPERTIES				
	Unit	Creapol RS 2320-18	Creanate 6136	Test Method
Density (21°C)	g/cm^3	1.06 - 1.10	1.20 - 1.25	ASTM D 4052
Viscosity (25°C)	cP	250 - 500	210 - 250	ASTM D 4878
NCO Number	%	-	30,5 - 31	ASTM D 5155
	Unit	Value	Test Method	
Component Temperature	^{0}c	21^{0}c		
Cream Time	second	3 ± 1	Internal Method	
Gel Time	second	6 ± 2	Internal Method	
Tack Free Time	second	8 ± 3	Internal Method	
Free Rise Density	kg/m^3	18 ± 3	EN 1602	
Compressive Strength	kPa	>20	EN 826	
Closed Cell Content	%	<40	ISO 4590	
Thermal Conductivity	W/m.K	<0,033	EN 12667	

PROCESS CONDITIONS

CREAPOL RS 2320/18 must be processed using designated two component spray machines only. These machines should have a mixing ratio of 100:100 in parts by volume. The transport hoses should be set at a temperature of 30 – 50°C, depending on ambient conditions. It is necessary to use a component (mixing) pressure of at least 60 bar. Usually this requires a machine setting of 90 – 115 bar. Pressure difference between the two components should never exceed 15 bar. CREAPOL RS 2320/18 can be applied in layers of max. 50 mm. Higher foam thicknesses should be obtained by applying multiple layers. Before application the processor should check the condition of the substrate. Dust, water or grease should be removed prior to application. Take special care for dew formation of the substrate under certain climatic conditions. (dewpoint determination), dewpoint should be 3°C lower than substrate temperature. When in doubt test the adhesion of the foam onto the substrate.

The substrate temperature should be at least 5°C. Ambient and humidity can have a significant influence on the EN14315-1:2013 performance of the product. Drums CREAPOL RS 2320/18 should be mixed well before use.

STORAGE	SHELF LIFE	PACKAGING
Product components are sensitive to moisture. So they must be stored in the original sealed drums at storage temperature. Polyol component must be mixed before use	CREAPOL RS 2320-18 can be stored for 6 months at approximately 25 oC in its closed package. High temperature storage causes shortening of shelf life.	CREAPOL RS 2320-18 is packaged in 200 kg drums. Creanate 6136 is packaged in 250 kg drums.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREAPOL RS 2323-30

PRODUCT DESCRIPTION

CREAPOL RS 2323/30 is a polyurethane foam system used in spray applications. The application rate is 1: 1 by volume. Thanks to its closed cell structure, it shows high thermal insulation performance even in thin applications. Does not contain HCFC or HFC blowing agents.

FEATURES OF PRODUCT COMPONENTS				
	Unit	Creapol RS 2323-30	Creanate 6136	Test Method
Density (21°C)	g/cm^3	1,0 - 1,2	1.20 - 1.25	DIN 51757
Viscosity (25°C)	MPa.s	350 - 500	160 - 240	ASTM D 4878
NCO Number	%	-	30,5 - 31,5	ASTM 5155

RECOMMENDED CONTENTS RATIOS FOR THE REACTION			
	Name	Unit	Value
Polyol Component	Creapol RS 2323/30	by weight	100
Isocyanate Component	Creanate 6136 (PMDI)	by weight	110

TYPICAL REACTION VALUES OF THE COMPONENTS			
	Unit	Value	Test Metodu
Component Temperature	°C	21	
Cream Time	second	3 ± 1	Flokser Chemistry Internal Method PR 001
Gel Time	second	6 ± 2	Flokser Chemistry Internal Method PR 001
Touch Time	second	8 ± 3	Flokser Chemistry Internal Method PR 001
Free Rise Density	kg/m^3	29 - 31,5	Flokser Chemistry Internal Method PR 002
Compressive Strength	kPa	150 - 170	TS EN 826
Thermal Conductivity	W / m.K	See Performance Chart	EN 14315 - 1

PROCESS CONDITIONS

CREAPOL RS2323/30 must be processed using designated two component spray machines only.
These machines should have a mixing ratio of 100:100 in parts by volume.
The transport hoses should be set at a temperature of 30 – 50oC, depending on ambient conditions.
It is necessary to use a component (mixing) pressure of at least 60 bar. Usually this requires a machine setting of 90 – 115 bar. Pressure difference between the two components should never exceed 15 bar.
CREAPOL RS 2323/30 can be applied in layers of max. 30 mm. Higher foam thicknesses should be obtained by applying multiple layers allowing sufficient time to cool the previous layers.
Before application the processor should check the condition of the substrate. Dust, water or grease should be removed prior to application. Take special care for dew formation of the substrate under certain climatic conditions. (dewpoint determination), dewpoint should be 3oC lower than substrate temperature. When in doubt test the adhesion of the foam onto the substrate. The substrate temperature should be at least 5oC.
Ambient and humidity can have a significant influence on the EN14315-1:2013 performance of the product.

*Tests were carried out in a laboratory environment with a 3000 rpm mixer as hand casting. The ambient temperature was taken as 21°C. The test values given on the low pressure machine and the high pressure machine will vary. The times start with the mixing of the mixture. Density value is free cast value

Performance chart (Sprayed insulation product, CCC4, diffusion open or no facings.)					
Thickness mm)	λ_D (W/m.K)	R_D (m^2K/W)	Thickness (mm)	λ_D (W/m.K)	R_D (m^2K/W)
25	0,035	0,71	115	0,034	3,38
30	0,035	0,86	120	0,033	3,64
35	0,035	1,00	125	0,033	3,79
40	0,035	1,14	130	0,033	3,94
45	0,035	1,29	135	0,033	4,09
50	0,035	1,47	140	0,033	4,24
55	0,035	1,57	145	0,033	4,39
60	0,035	1,71	150	0,033	4,54
65	0,035	1,86	155	0,033	4,70
70	0,035	2,00	160	0,033	4,85
75	0,035	2,14	165	0,033	5,00
80	0,034	2,35	170	0,033	5,15
85	0,034	2,50	175	0,033	5,30
90	0,034	2,65	180	0,033	5,45
95	0,034	2,79	185	0,033	5,61
100	0,034	2,94	190	0,033	5,76
105	0,034	3,09	195	0,033	5,91
110	0,034	3,23	200	0,033	6,06

*Product components are sensitive to moisture. So they must be stored in the original sealed drums at storage temperature. Polyol component must be mixed before use.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREAPOL RS 3323 - 30

PRODUCT DESCRIPTION

CREAPOL RS 3323/30 is a polyurethane foam system used in spray applications. The application rate is 1: 1 by volume. Thanks to its closed cell structure, it shows high thermal insulation performance even in thin applications. Does not contain HCFC or HFC blowing agents.

APPLICATIONS AREAS

- Roof Applications
- Insulation of Buildings
- Insulation of Houses
- Industrial Buildings
- Farm Buildings
- Tank – Silo Insulation
- Floor Insulation
- Ship Insulation
- Storage Insulation
- Flame Retardancy

GENERAL PROPERTIES

- Fast curing
- Closed Cell
- Superior Thermal Insulation
- Mechanical Strength
- Corrosion resistance
- Abrasion resistance

Polimiks : Creapol RS 3323 - 30 **İzosiyanat :** Creanate PMDI 6136

TECHNICAL PROPERTIES				
	Unit	Creapol RS 3323-30	Creanate 6136	Test Method
Density (21°C)	g/cm^3	1.2 - 1.25	1.20 - 1.25	ASTM D 4052
Viscosity (25°C)	cP	180 - 240	210 - 250	ASTM D 4878
NCO Number	%	-	30,5 - 31	ASTM D 5155
	Unit	Value	Test Method	
Component Temperature	^{0}c	21^{0}c		
Cream Time	second	3 ± 1	Internal Method	
Gel Time	second	6 ± 2	Internal Method	
Tack Free Time	second	8 ± 3	Internal Method	
Free Rise Density	kg/m^3	29 ± 2	EN 1602	
Compressive Strength	kPa	>200	EN 826	
Closed Cell Content	%	>90	ISO 4590	
Thermal Conductivity	W/m.K	0,025 - 0,028	EN 12667	
Fire Behaviour	-	E	EN 11925-2	

PROCESS CONDITIONS

CREAPOL RS 3323/30 must be processed using designated two component spray machines only. These machines should have a mixing ratio of 100:100 in parts by volume. The transport hoses should be set at a temperature of 30 – 50°C, depending on ambient conditions. It is necessary to use a component (mixing) pressure of at least 60 bar. Usually this requires a machine setting of 90 – 115 bar. Pressure difference between the two components should never exceed 15 bar. CREAPOL RS 3323/30 can be applied in layers of max. 30 mm. Higher foam thicknesses should be obtained by applying multiple layers allowing sufficient time to cool the previous layers. Before application the processor should check the condition of the substrate. Dust, water or grease should be removed prior to application. Take special care for dew formation of the substrate under certain climatic conditions. (dewpoint determination), dewpoint should be 3°C lower than substrate temperature. When in doubt test the adhesion of the foam onto the substrate. The substrate temperature should be at least 5°C. Ambient and humidity can have a significant influence on the EN14315-1:2013 performance of the product.

STORAGE	SHELF LIFE	PACKAGING
Product components are sensitive to moisture. So they must be stored in the original sealed drums at storage temperature. Polyol component must be mixed before use.	Creapol RS 3323-30 can be stored for 6 months at approximately 25°C in its closed package. High temperature storage causes shortening of shelf life.	Creapol RS 3323-30 is packaged in 200 kg drums. Creanate 6136 is packaged in 250 kg drums.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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CREAPOL RS 2323 - 40

PRODUCT DESCRIPTION

CREAPOL RS 2323/40 is a polyurethane foam system used in spray applications. The application rate is 1: 1 by volume. Thanks to its closed cell structure, it shows high thermal insulation performance even in thin applications. Does not contain HCFC or HFC blowing agents.

APPLICATIONS AREAS

- Roof Applications
- Insulation of Buildings
- Insulation of Houses
- Industrial Buildings
- Farm Buildings
- Tank – Silo Insulation
- Floor Insulation
- Ship Insulation
- Storage Insulation
- Flame Retardancy

GENERAL PROPERTIES

- Fast curing
- Closed Cell
- Superior Thermal Insulation
- Superior Mechanical Strength
- Corrosion resistance
- Abrasion resistance

Polimiks : Creapol RS 2323 - 40 **İzosiyanat :** Creanate PMDI 6136

TECHNICAL PROPERTIES				
	Unit	Creapol RS 2323 - 40	Creanate 6136	Test Method
Density (21°C)	g/cm^3	1.2 - 1.25	1.20 - 1.25	ASTM D 4052
Viscosity (25°C)	cP	180 - 240	210 - 250	ASTM D 4878
NCO Number	%	-	30,5 - 31	ASTM D 5155
	Unit	Value	Test Method	
Component Temperature	^{0}c	21^{0}c		
Cream Time	second	3 ± 1	Internal Method	
Gel Time	second	6 ± 2	Internal Method	
Tack Free Time	second	8 ± 3	Internal Method	
Free Rise Density	kg/m^3	36 ± 2	EN 1602	
Compressive Strength	kPa	>300	EN 826	
Closed Cell Content	%	<0,2	ISO 4590	
Thermal Conductivity	W/m.K	0,023 - 0,025	EN 12667	
Fire Behaviour	-	E	EN 11925-2	

PROCESS CONDITIONS

CREAPOL RS 2323/40 must be processed using designated two component spray machines only. These machines should have a mixing ratio of 100:100 in parts by volume. The transport hoses should be set at a temperature of 30 – 50°C, depending on ambient conditions. It is necessary to use a component (mixing) pressure of at least 60 bar. Usually this requires a machine setting of 90 – 115 bar. Pressure difference between the two components should never exceed 15 bar. CREAPOL RS 2323/40 can be applied in layers of max. 20 mm. Higher foam thicknesses should be obtained by applying multiple layers allowing sufficient time to cool the previous layers. Before application the processor should check the condition of the substrate. Dust, water or grease should be removed prior to application. Take special care for dew formation of the substrate under certain climatic conditions. (dewpoint determination), dewpoint should be 3°C lower than substrate temperature. When in doubt test the adhesion of the foam onto the substrate. The substrate temperature should be at least 5°C. Ambient and humidity can have a significant influence on the EN14315-1:2013 performance of the product.

STORAGE	SHELF LIFE	PACKAGING
Product components are sensitive to moisture. So they must be stored in the original sealed drums at storage temperature. Polyol component must be mixed before use.	Creapol RS 2323-40 can be stored for 6 months at approximately 25°C in its closed package. High temperature storage causes shortening of shelf life.	Creapol RS 2323-40: is packaged in 200 kg drums. Creanate 6136 is packaged in 250 kg drums.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

FLOKSER CHEMISTRY commits protecting human health and the environment during the production conditions and customer conditions. So FLOKSER KİMYA is always ready to help its customers in this regard. Please contact to your FLOKSER KİMYA representative when you need help.

CREAPOL RS 3321 - 55/1

PRODUCT DESCRIPTION

CREAPOL RS 3321-55/1 is a polyurethane foam system used in spray applications. The application rate is 1: 1 by volume. Thanks to its closed cell structure, it shows high thermal insulation performance even in thin applications. Does not contain HCFC or HFC blowing agents.

APPLICATIONS AREAS

- Roof Applications
- Insulation of Buildings
- Insulation of Houses
- Industrial Buildings
- Farm Buildings
- Tank – Silo Insulation
- Floor Insulation
- Ship Insulation
- Storage Insulation
- Flame Retardancy

GENERAL PROPERTIES

- Fast curing
- Closed Cell
- Superior Thermal Insulation
- Superior Mechanical
- Strength
- Corrosion resistance
- Abrasion resistance

Polimiks : Creapol RS 3321 - 55/1 **İzosiyanat :** Creanate PMDI 6136

TECHNICAL PROPERTIES

	Unit	Creapol RS 3321-55/1	Creanate 6136	Test Method
Density (21°C)	g/cm³	1.2 - 1.25	1.20 - 1.25	ASTM D 4052
Viscosity (25°C)	cP	150 - 350	210 - 250	ASTM D 4878
NCO Number	%	-	30,5 - 31	ASTM D 5155
	Unit	**Value**	**Test Method**	
Component Temperature	°c	21°c		
Cream Time	second	3 ± 1	Internal Method	
Gel Time	second	6 ± 2	Internal Method	
Tack Free Time	second	8 ± 3	Internal Method	
Free Rise Density	kg/m³	55 ± 2	EN 1602	
Compressive Strength	kPa	>300	EN 826	
Closed Cell Content	%	>90	ISO 4590	
Thermal Conductivity	W/m.K	0,025 - 0,028	EN 12667	
Fire Behaviour	-	E	EN 11925-2	

PROCESS CONDITIONS

CREAPOL RS 3321-55/1 must be processed using designated two component spray machines only. These machines should have a mixing ratio of 100:100 in parts by volume. The transport hoses should be set at a temperature of 30 – 50°C, depending on ambient conditions. It is necessary to use a component (mixing) pressure of at least 60 bar. Usually this requires a machine setting of 90 – 115 bar. Pressure difference between the two components should never exceed 15 bar. CREAPOL RS 3321-55/1 can be applied in layers of max. 20 mm. Higher foam thicknesses should be obtained by applying multiple layers allowing sufficient time to cool the previous layers. Before application the processor should check the condition of the substrate. Dust, water or grease should be removed prior to application. Take special care for dew formation of the substrate under certain climatic conditions. (dewpoint determination), dewpoint should be 3°C lower than substrate temperature. When in doubt test the adhesion of the foam onto the substrate. The substrate temperature should be at least 5°C. Ambient and humidity can have a significant influence on the EN14315-1:2013 performance of the product.

STORAGE	SHELF LIFE	PACKAGING
Product components are sensitive to moisture. So they must be stored in the original sealed drums at storage temperature. Polyol component must be mixed before use.	Creapol RS 3321-55/1 can be stored for 6 months at approximately 25°C in its closed package. High temperature storage causes shortening of shelf life.	CCreapol RS 3321-55/1 kg is packaged in 200 kg drums. Creanate 6136 is packaged in 250 kg drums.

NOTICE REGARDING SAFETY AND USAGE

Material Safety Data Sheet (MSDS) will be provided to you by FLOKSER KİMYA sales representative during the product supply. It is advisible to review this form before handling and use and also to check your own handling, safety and process contidions. It is necessary to dispose of the finished product drums according to MSDS.

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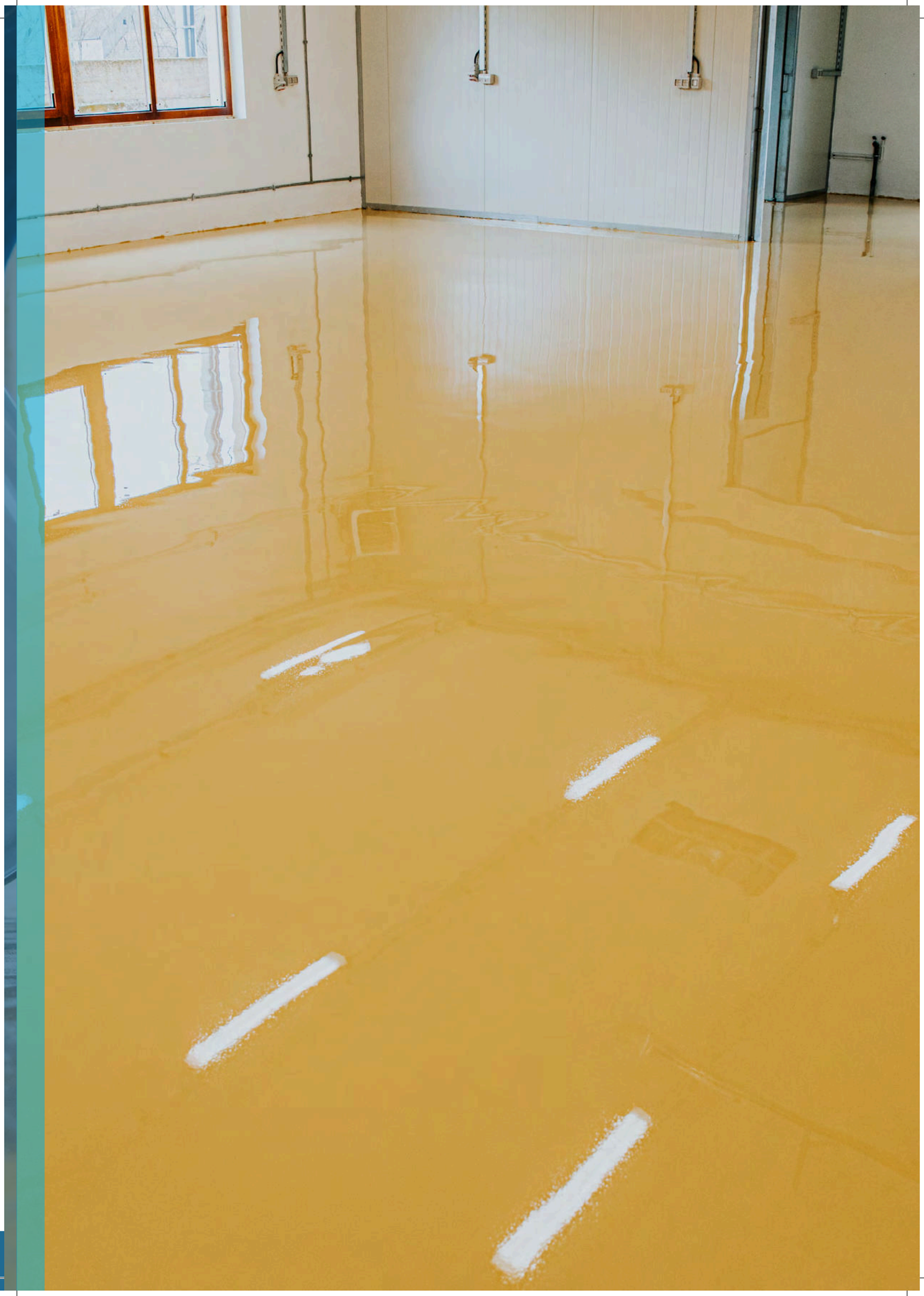
Anıtkabir


Gürpınar Stadyumu


Nohutlu barajı

REFERENCE APPLICATIONS	
Project	**City**
Anıtkabir	Ankara
Orman Genel Müdürlüğü	Ankara
Çukurova Üniversitesi Devlet Hastanesi	Adana
Elmalı Devlet Hastanesi	Antalya
Antalya Üniversitesi	Antalya
Alanya Diş Hekimliği Hastanesi	Antalya
Hava Harp Okulu	Antalya
Ako Lastik Fabrikası	Çankırı
Karatekin Üniversitesi	Çankırı
Sincan Kültür Üniversitesi	Ankara
Yüksek İhtisas Üniversitesi	Kırıkkale
KYK Öğrenci Yurdu	Kırıkkale
Polatlı Belediyesi Kültür Merkezi	Ankara
Sütaş Fabrikası	Aksaray
İstanbul Üniversitesi Mimarlik Fakültesi	İstanbul
Gürpınar Stadyumu	İstanbul
Jandarma Genel Komutanlığı	Ankara
Kara Harp Okulu	İstanbul
Ege Üniversitesi	İzmir
Hugo Boss Fabrika	İzmir
Bağlıca Pazar Yeri	Ankara
Döktaş Jant Fabrikası	Manisa
Döktaş Alüminyum Fabrikası	Manisa
Döktaş Döküm Fabrikası	Bursa
Parsan Üretim Tesisi	İstanbul
Omtaş Döküm Fabrikası	İstanbul
Olimpiyat Spor Tesisleri	Bursa
Kavlak Zeytincilik	Bursa
Beypiliç Üretim Tesisleri	Bolu
Su Yapı Terfİ Binaları	Muğla
Çiğli Devlet Hastanesi	İzmir
Ak Nişasta	Kırklareli
Ilgın İnşaat Toki Toplu Konut	İstanbul
Tübitak Gebze Yerleşkesi	İstanbul
Unilever Üretim Tesisi	İstanbul
Belediye Hizmet Binası	Karabük
Maltepe Cezaevi	İstanbul
Bartın Üniversitesi	Bartın
Nohutlu Barajı	Urfa
Sulama Kanalı	Mardin
Kaanlar Süt	Denizli











EXPORTER COMPANY

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