AYKS

ARTES YAPI KİMYASALARI

AYKS

As AYKS, we are proud of to bear the reliable responsibility of products and services which we present for creating comfortable living spaces everywhere people are located in and living in and our contrubitions for envirement.

We know that the it cannot be measured by anything in the world that enthusiasm which created by people living in peace where they are located in.

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AYKS 100

Normal Setting, Non-shrink Flowable Grout

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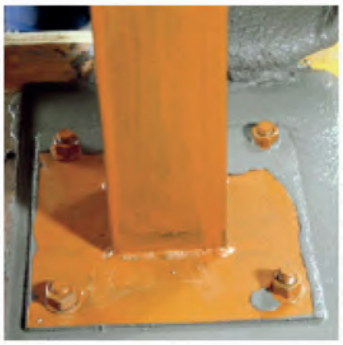

CE TS EN 1504 – 3, R4

Public Pos. No: 04.613/3C

Product Description

It is a cement based, one component, non-shrink, self-levelling, flowable, mortar with high adherence and strength.

Areas of Usage

- Indoor and outdoor applications,
- To fix steel columns and poles,
- Under all kinds of industrial machine bearings,
- In engineering structures such as metro, highways, dams,
- For repair of sections where reinforced concrete curtains are joined to the beam, in strengthening projects,
- To combine prefabricated elements.

Features and Benefits

- It is an easy to use material, made ready just by adding water.
- It does not shrink, it shows high fluidity.
- No decomposition and water formation.
- It can be pumped or poured.
- It does not contain solvent, asbestos.
- It is resistant to freezing and thawing.
- Application thickness is 10-75 mm
- It sticks well to concrete, doesn't contain chlorine.

Application Instructions

Surface Quality: Concrete and metal surfaces must be clean, smooth, solid, free from cement slurry and weakened parts, any antiadhesive substance such as dust, oil, ice, dirt, rust, mold oil, detergent and waste. Pull off strength of concrete must be above 1 MPa.
All molds must have sufficient strength, AYKS 100 mold oil must be applied and must be insulated to prevent leaks. Insulation can be made by using AYKS 100 1K under, around and at the junction points of the mold. Whether the mold is leakproof can be controlled by pre-wetting water. During grouting, a suitable feed hopper / funnel should be made on one side of the mold in order to maintain a constant grouting height of 150 - 200 mm.
Surface Preparation: High pressure water should be prepared by cleaning with suitable mechanical surface preparation techniques such as jetting, roughening, sandblasting. Absorbent surfaces must be pre-wetted, but there should be no water accumulations.
Mixing: 25 kg of powder material is poured onto 3.0 - 4.0 lt of water. These rates given can vary depending on the weather temperature. The mortar is mixed with a 400 - 600 rpm mixer until a homogeneous and a consistency without lumps is obtained for about 3 min. After 2 min. of rest, the material is ready to be used again for 30 seconds.
The prepared mixture should be placed in 20-25 min. depending on the air temperature and the amount of water. AYKS 100 should be poured from one side in order to fill under the gaps surrounded by four sides and covered. So it discharges air and prevents gaps. It can be pushed from one side with a long piece of iron during casting to speed up flow.
The thickness of the casting should be 10-75 mm as a layer thickness at a time. It is advisable to carry out a preliminary test if small diameter anchors are to be used.
For applications thicker than 75 mm, it is possible to add aggregates of 5-12 mm in diameter at the rate of 30% of the material.

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Normal Setting, Non-shrink Flowable Grout

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Aggregate addition is done in two ways;

- The aggregate is added into the prepared mortar. When a homogenous mixture is obtained, this process is continued for 3-5 minutes.
- Aggregate is poured or spread on the floor to be applied. The mixture is then poured onto the prepared AYKS 100 The self-leveling mortar also allows the possibility of wrapping around the aggregate to obtain a high-strength concrete.

Application Notes / Restrictions

- For outdoor applications, the first 3 hours of sunshine should be protected from rain and frost.
- In cement based products, reaction times are affected by ambient and ground temperatures. Reaction times are shortened in a hot environment, and extend in a cold environment.
- Hot water should be used in cold conditions.
- In hot environments, cold mixing water should be used.
- During the application of the product, work clothes suitable for occupational health and safety rules should be worn and appropriate glasses and masks should be used.
- Do not use for patch repair work
- Do not use a vibrator
- Do not apply in cases with frost risk
- Perform casting or pumping only from one direction
- For best results, it is recommended that the material be conditioned between +15°C and +25°C before use.
- It must be protected after application against adverse weather conditions such as direct sunlight, high air temperature (above +35 °C), rain and frost.
- Immediately after application, before hardened, the equipment should be cleaned with water. After the product is hardened, it should be cleaned by mechanical methods.

Technical Data

General Information		
Appearance	Grey	
Shelf Life	12 months in unopened package in dry environment	
Package	25 kg kraft bag	
Grain Size	D_{max}: 3 mm	
Application Information		
Application Temperature	(+5°C) - (+35°C)	
Mixture Ratio	3,0 - 4,0 lt water/25 kg powder	
Workability Time	Minimum 20 min.	
Mortar Density	2,3 ±0,1 kg/lt	
Time to put into Service	~24 hours	
Application Thickness	At least 10 mm / Maximum 75 mm	
Performance Information		
Flexural Strength (28 days)	≥ 9.0 N/mm²	
Pressure Resistance (28 days)	≥ 60,0 N/mm²	(TS EN 196-1)
Adhesion Strength (28 days) (TS EN 1542)	≥2.0 N/mm²	
Capillary Water Absorption (28 days) (TS EN 13057)	≤ 0,5 kg/(m².h^{0-5})	

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AYKS 100

Normal Setting, Non-shrink Flowable Grout

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Consumption Table

AYKS 100	Mixture Density (gr / lt)	Powder consumption per 1 liter mortar (kg)	Mixture Water Amount (lt)
25 kg kraft bag	2,3±0,1	~2,00	3,0 – 4,0

Technical data are approximate values obtained from the laboratory study of Tekno Construction Chemicals for finished products obtained at +20°C air temperature and 50% relative air humidity and valid for its performance after 28 days.

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AYKS 200

Norr Ceramic and Granite Adhesive

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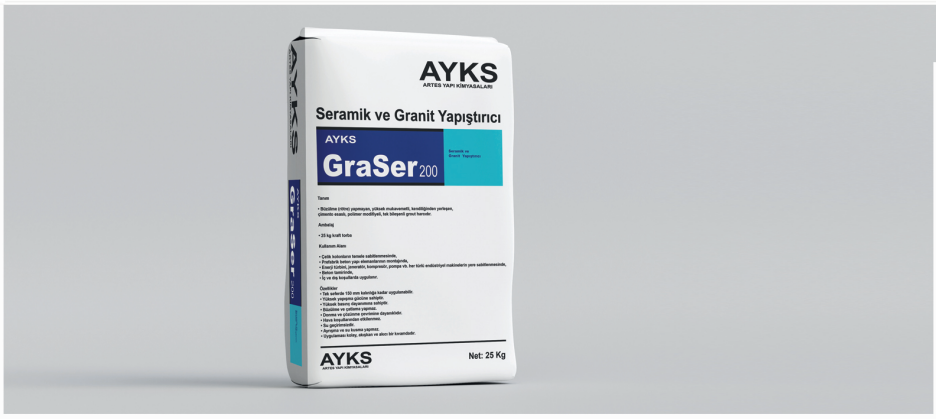

TS EN 12004 – C2TE

Public Pos. No: 10.300.2203

Product Description

C2TE class adhesive mortar with high bonding strength for porcelain, ceramic, granite ceramics, marble, briquette, etc.

Areas of Usage

- indoor and outdoor, horizontal and vertical applications
- On terrace and balconies,
- In places such as a swimming pool that are constantly exposed to water,
- For adhering large size ceramics with a water absorption rate of less than 3%
- For adhering materials such as granite ceramic, marble and natural granite,
- Where there is a lot of heat difference,
- For applications on gypsum plaster, gypsum board, aerated concrete and exposed concrete,
- It gives excellent results in ceramic and granite bonding works on the exterior facades.
- For adhering natural stone, btb, glass mosaics,
- For adhering heat insulation boards and plates made of pumice or aerated concrete to exposed concrete,
- For walling with pumice or aerated blocks,
- In wet volumes such as swimming pool, water depot, bath, etc.

Features and Benefits

- Easy to prepare and apply.
- High adhesion.
- It does not slip in vertical applications.
- The processing time is long.
- No water permeability.

Application Instructions

Surface Quality: The surfaces should be clean, smooth, sound and at the same time level, weak parts should be removed and damaged surfaces should be repaired with AYKS 200. There should be no grease or mortar rust on the surface.
Surface Preparation: If applied on marble, ceramics and pellets, the surfaces should be roughened. Concrete floor should be damp but there should be no water accumulation.
Mixing: 7,0 - 7,5 lt clean, clear water received from normal ambient temperature into a clean container which is free from all kinds of materials which prevent adhesion. AYKS 200 in 25 kg bag as powder is poured into a container filled with water. The product is mixed with a low speed mixer until a homogeneous mixture without lumps is obtained. The mortar obtained at the end of the process should be rested for 5-10 min and mixed again until it becomes homogenous again for 1-2 minutes.

Application Notes / Restrictions

- The product may be irritating to the skin; work clothes, protective gloves, masks and glasses must be used. Protective cream can also be applied before starting work. In case of mortar contact with eyes, eyes should be washed immediately with warm water and consult a doctor.
- It must be protected under ambient conditions below (+) 5°C, the product should be covered with nylon or exposed to freezing by spreading heat insulation plates.

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AYKS 200

Ceramic and Granite Adhesive

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- It must be protected at temperatures above (+) 35°C, covered with nylon or heat insulation plates should be laid out to prevent the product from being exposed to sudden water loss.
- At least 24 hours after application of AYKS 200 the joint filling should be started.
- Do not add foreign matter.
- It must be protected after application against adverse weather conditions such as direct sunlight, high air temperature (above +35°C), rain and frost. AYKS 200, should be made with clean water without getting hard and hard. Immediately after application, hands and face should be washed thoroughly with soap and warm water.
- Immediately after applying the equipment, the mortar should be washed with water without hardening.

Storage Conditions

It should be stored in original unopened package, in cool and dry environment, protected from freezing.

Technical Data

General Information	
Appearance/Color	Grey or White
Shelf Life	12 months
Package	25 kg kraft bag
Application Information	
Application Temperature	(+5°C) - (+35°C)
Mixture Ratio	7,0 - 7,5 lt water / 25 kg powder
Pot Life	3 Hours
Service Temperature	(-20°C) - (+70°C)
Slide	≥ 5 mm
Pedestrian Traffic Opening Time	1 day on the wall for 8 hours
Performance Information	
Open Time	≥ 0.5 N/mm² after 30 min
Tensile Adhesion Strength	
After Dry Storage	≥ 1.0 N/mm²
After Wet Storage	≥ 1.0 N/mm²
After Heat Storage	≥ 1.0 N/mm²
After Freeze - Thaw Cycles	≥ 1.0 N/mm²
Fire Reaction Class (TS EN 13501-1)	A1

Consumption Table

AYKS 200	Mixture Density (gr / lt)	1 m² Powder Consumption (kg)	Mixture Water Amount (lt)
25 kg kraft bag	~1,80	4 – 5	7,0 – 7,5

Technical data are approximate values obtained from the laboratory study of Tekno Construction Chemicals for finished products obtained at +20°C air temperature and 50% relative air humidity and valid for its performance after 28 days.

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AYKS 201

Flexible and High Performance Ceramic and Granite Adhesive

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TS EN 12004 – C2TE S1

Public Pos. No: 10.300.2204

Product Description

Cement based, flexible adhesive mortar with reduced slip property used to adhere products such as ceramics, porcelain, granite, marble, natural stone, glass mosaic and pressed brick with extended working time. (C2=cement based adhesive with additional properties, T=reduced slip, E=extended open waiting time S1=flexible)

Areas of Usage

- Indoor and outdoor, on terrace and balconies,
- In places such as a swimming pool that are constantly exposed to water,
- In the application of coating materials of size 40x40 cm and larger,
- Wherethere is intense pedestrian and load traffic or where heat changes are high,
- For adhering materials such as granite ceramic, marble and natural granite,
- Where there is a lot of heat difference,
- For applications on gypsum plaster, gypsum board, aerated concrete and exposed concrete,
- It gives excellent results in ceramic and granite bonding works on the exterior facades.
- For adhering natural stone, BTB, glass mosaics,
- In wet volumes such as swimming pool, water depot, bath, etc,
- On floors with floor heating, in heated pools, in thermal pools, in swimming pools where water is not drained in winter, in walls and floor coverings in cold storages.

Features and Benefits

- High adhesion.
- It does not slip in vertical applications.
- Easy to prepare and apply.
- It is resistant to water, nipple and frost.
- Processing time is long.
- It does not slip in vertical applications.

Application Instructions

Surface quality: The surfaces should be clean, smooth, sound and at the same time level, weak parts should be removed and damaged surfaces should be repaired with AYKS There should be no grease or mortar rust on the surface.
Surface Preparation: If applied on marble, ceramics and pellets, the surfaces should be roughened. Concrete floor should be damp but there should be no water accumulation.
Mixing: 6,0 - 6,5 lt clean, clear water received from normal ambient temperature into a clean container which is free from all kinds of materials which prevent adhesion. AYKS 201 in 25 kg bag as powder is poured into a container filled with water. The product is mixed with a low speed mixer with ceramic mixer tip until a homogeneous mixture without lumps is obtained. The mortar obtained at the end of the process should be rested for 5-10 minutes and mixed again until it becomes homogenous for 1-2 minutes.

Application Notes / Restrictions

- The product may be irritating to the skin. Work clothes, protective gloves, masks and glasses must be used.
- A protective cream can also be applied before starting. In case of mortar contact with eyes, eyes should be washed immediately with warm water and consult a doctor.
- It must be protected under ambient conditions below (+) 5°C, the product should be covered with nylon or exposed to freezing by spreading heat insulation plates.

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AYKS 201

Flexible and High Performance Ceramic and Granite Adhesive

- It must be protected at temperatures above (+) 35°C, covered with nylon or heat insulation plates should be laid out to prevent the product from being exposed to sudden water loss.
- At least 24 hours after the application of AYKS 201 the joint filling should be started.
- Do not add foreign matter.
- It must be protected after application against adverse weather conditions such as direct sunlight, high air temperature (above + 35°C), rain and frost. AYKS 201 should be cleaned with water without getting hard and hard. Immediately after application, hands and face should be washed thoroughly with soap and warm water.
- Immediately after applying the equipment, the mortar should be washed with water without hardening.
- Combined methods should be preferred in applications where there is intense pedestrian and load traffic or where heat changes are high.

Storage Conditions

It should be stored in original unopened package, in cool and dry environment, protected from freezing.

Technical Data

General Information	
Appearance/Color	Grey or White
Shelf Life	12 months
Package	25 kg kraft bag
Application Information	
Application Temperature	(+5°C) - (+35°C)
Mixture Ratio	6.0 - 6,5 water / 25 kg powder
Pot Life	6 hours
Service Temperature	(-20°C) - (+70°C)
Slip (EN 1308)	≤ 0.5 mm
Pedestrian Traffic Opening Time	1 day on the wall for 8 hours
Performance Information	
Open Time	≥ 0.5 N/mm² after 30 min
Tensile Adhesion Strength	
After Dry Storage	≥ 1.0 N/mm²
After Wet Storage	≥ 1.0 N/mm²
After Heat Storage	≥ 1.0 N/mm²
After Freeze - Thaw Cycles	≥ 1.0 N/mm²
Flexibility (EN 12002)	≥ 2,5 mm - S1 Flexible
Fire Reaction Class (TS EN 13501-1)	A1

Consumption Table

AYKS 201	Mixture Density (gr / lt)	1 m² Powder Consumption (kg)	Mixture Water Amount (lt)
25 kg kraft bag	~1,70	4 – 5	6,0 - 6,5

Technical data are approximate values obtained from the laboratory study of Tekno Construction Chemicals for finished products obtained at +20°C air temperature and 50% relative air humidity and valid for its performance after 28 days.

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AYKS 202

Joint Filler, Fuga (1-6 mm)

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TS EN 13888 – CG1

Public Pos. No: 10.300.2231

Product Description

Cement based joint filler for ceramics and tiles.

Areas of Usage

- Indoors,
- In horizontal and vertical joints,
- Tiles, ceramics, natural stone,
- Pressed brick, glass mosaic, granite,
- Suitable for 1 -6 mm joint spacing.

Features and Benefits

- Easy to prepare and apply.
- Provides a smooth surface.
- It is abrasion resistant.
- It does not crack.
- Long workability time.

Application Instructions

Surface Preparation: Joints on floors coated with tiles, ceramic, natural stone, pressed bricks, glass mosaic, granite and other flooring materials should be cleaned thoroughly before application, removed from dust and wiped with a wet sponge.
Mixing: The material becomes ready for use only by adding water. 20 kg AYKS 202 is poured into 6.4 - 6,8 lt water. The mixture is mixed with a slow speed drill until homogenous. When the prepared mixture reaches the desired consistency, it is rested for 5 minutes and mixed again. The mixture is applied to the surface by means of rubber trowel in horizontal and vertical applications.
Cleaning: It must be protected after application against adverse weather conditions such as direct sunlight, high air temperature (above+35°C), rain and frost. The product should be cleaned thoroughly with water and detergent before it is fully cured and hardened.

Application Notes / Restrictions

- 6,4 - 6,8 lt clean, clear water received from normal ambient temperature into a clean container which is free kinds of materials which prevent adhesion.
- The depth between the joints should be at least 2/3 of the ceramic thickness.
- AYKS 202 in 20 kg bag as powder s þoured into a container filled with water.
- The product is mixed with a low speed mixer until a homogeneous mixture without lumps is obtained.
- The mortar obtained at the end of the process should be rested for 5-10 minutes and mixed again until it becomes homogeneous for 1-2 minutes.

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AYKS 202

Joint Filler, Fuga (1-6 mm)

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Technical Data

General Information	
Appearance/Color	White and colored very fine powder
Shelf Life	12 months in unopened package in dry environment
Package	20 kg kraft bag
Application Information	
Application Temperature	(+5°C) - (+35°C)
Mixture Ratio	6.4 - 6,8 lt water / 20 kg powder
Pot Life	1 hour
Time to put into service	1 day
Consumption	See. Joint Filling Consumption Table
Performance Information	
Flexural Strength (EN 12808-3)	≥ 2.5 N/mm²
Bending After Freeze - Thaw Cycles (EN 12808-3)	≥ 2,5 N/mm²
Compressive Strength (EN 12808-3)	≥ 15 N/mm²
After Freeze - Thaw Cycles. (EN 12808-3)	≥ 15 N/mm²
Shrinkage (EN 12808-4)	≤ 3 mm/m
Abrasion Resistance (EN 12808-2)	≤ 2000 mm^3
Water Absorption 30 min Water Absorption 4 hours (EN 12808-5)	≤ 5g ≤ 10g
Temperature Resistance	(-20°C) - (+70°C)

Technical data are approximate values obtained from the laboratory study of Tekno Construction Chemicals for finished products obtained at +20°C air temperature and 50% relative air humidity and valid for its performance after 28 days.

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AYKS 300

Crystallized Waterproofing Material

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CE TS EN 1504-3

Public Pos. No: 10.300.2172 - 10.300.2041

Product Description

Cement based, single component, applied to concrete mixture or concrete surfaces, crystallized structure waterproofing material that reacts with water coming from the concrete.

Areas of Usage

- Elevator pits,
- Water storage, swimming and ornamental pools,
- Reinforced concrete pipes,
- As a concrete additive that provides crystallized insulation during concrete casting,
- In the ruin and infrastructure materials,
- Basically, on the basement walls,
- In engineering constructions such as metro, tunnel, dam, highway,
- It is used for negative and positive water insulation of buildings like basement walls.

Features and Benefits

- The crystallization feature effectively prevents the passage of water from the surface.
- Resistant to positive and negative water pressure.
- It is easy to use, mixed with plain water and used.

Application Instructions

Surface Quality: The surfaces must be clean, smooth, solid, free from any antiadhesive substance such as dust, oil, dirt, rust, mold oil, detergent and waste. In case of segregation in concrete, it should be discarded and loose parts should be removed, weak parts should be removed. If there is crack, hollow on the floor or wall to be applied, it should be repaired with appropriate AYKS repair mortars. AYKS 300 application should be started 3-4 days later.

Make sure that the slab or concrete is thrown in the direction of the water stream. The correct control of the curve is made in the following way. Beginning from the beginning to the gauge, put a scale on it. If it is determined that there is no inclination or reverse slope in the control result, the application should not be started and the direction of the water flow should be adjusted by performing concrete and slab treatment. If necessary, additional screed or concrete must be poured.

Surface Preparation: If the surface to be insulated is dry, it should be wetted and ready to be applied to the water.

6,0-7,0 lt clean, clear water received from normal ambient temperature into a clean container which is free from all kinds of materials which prevent adhesion. The powder is in the vessel filled with water and the Teknomer 100, which is in the 20 kg bag, is emptied. The product is mixed with a low speed mixer until a homogeneous mixture without lumps is obtained. Mixing time should be at least 5 minutes, the mortar obtained at the end of the process should be rested for 3 min. and mixed again until it becomes homogenous for 2 min.

The application of AYKS 300 is done in three ways;

- By brush: On dry floors, the concrete surface is moistened and saturated with water. There may be moisture on the surface, not condensation or ponding. If there is continuous water, leakage should be stopped with AYKS 300. Then the prepared mixture is applied to the surface 2-3 times with brush. Application can be made by hard bristle brush or mechanical spraying method. The application is completed from first left to right, second to top down. The waiting time between floors is as follows. When the concrete floor is checked manually, if the AYKS 300 does not leave a mark, the other layer can be applied.
- Hand Sprinkle Method: AYKS 300 is sprinkled on the grobeton before the concrete is poured. Depending on the demand AYKS 300 Then concrete is poured.
- The admixtures may be batched in either a central or truck mixer . For most applications, the recommended dosage of AYKS 300 admixture is as %2-3 by mass of cement. It is mixed for 3-5 minutes. Preliminary testing is recommended for different kinds of applications.

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AYKS 300

Crystallized Waterproofing Material

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The AYKS 300 admixture, which is determined according to the cement dosage of the concrete in the transmixer, is mixed with a low speed drill in a suitable container with about 6,0 - 7,0 kg water by weight and turned into an aqueous slurry. The prepared mixture is added to the rotating transmixer. Each mixture should be prepared with at most one cup of AYKS 300 and added to the concrete. In order to obtain a homogeneous mixture, the mixing time in the transmixer should be about 4-5 minutes.

Application Notes / Restrictions

- Follow work safety precautions. Use gloves, mask, glasses when using the product.
- Since it's cement based, do not breathe it dust, prevent contact it with skin and hands.
- Do not apply to wood, chipboard, mdf, plywood, PVC and metal surfaces.
- Only the specified amount of water can be used in the mixture. No more water should be added.
- Foreign materials should not be added.
- It must be protected after application against adverse weather conditions such as direct sunlight, high air temperature (above +35°C), rain and frost. The product should be cleaned thoroughly with water and detergent before it is fully cured and hardened.
- Immediately after application, before hardened, the equipment should be cleaned with water. After the product is hardened, it should be cleaned by mechanical methods

Technical Data

General Information	
Appearance	Grey Colored Powder
Shelf Life	12 months in unopened package in dry environment
Package	20 kg kraft bag
Application Information	
Application Temperature	(+5°C) - (+35°C)
Mixture Ratio	6,0 - 7,0 lt of water/ 20 kg powder
Pot Life	20 min.
Time To Put Into Service	5 Days
Performance Information	
Concrete Adhesion Strength (EN 1542)	≥ 1.0 N / mm²
Water impermeability	7 bar (Negative and Positive direction)
Capillary Water Intake Valve (EN 1062-3)	≤ 0.1 kg / m².h$^{0'5}$
Water Vapor Transfer (EN ISO 7783)	Class; Sd < 5 (Sd: Equivalent air layer thickness)
Temperature Resistance	(-25°C) - (+80°C)
Hazardous Substances (EN 12004)	See the safety data sheet
Fire Response	A1

Consumption Table

AYKS 300	Mixture Density (kg / liter)	1 m² for 2 floors Powder Consumption (kg)	Mixture Water Amount (liters)
20 kg kraft bag	~1,98	~2	6,0 - 7,0

Technical data are approximate values obtained from the laboratory study of Tekno Construction Chemicals for finished products obtained at +20°C air temperature and 50% relative air humidity and valid for its performance after 28 days.

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AYKS 301

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Quartz Aggregate Dry Shake Surface Hardener

TS EN 1504-2

Product Description

Applied to fresh concrete surfaces, cement, hard quartz aggregate, chemica additives, special color pigment and polymer additives consisting of powder surface hardener.

Areas of Usage

- Indoor and Outdoor,
- Parking area , and garage ramps,
- Underpasses subway stations,
- Material store, factories, fairgrounds, shopping malls where human traffic is intense, industrial buildings, gas stations, stations aircraft hangar etc. Wear resistance is applied in requested localities.
- Hangars and mechanical workshop

Features and Benefits

- It is used by sprinkling on fresh concrete by hand or with a machine.
- Provides resistance to dust.
- It is more resistant to wear.
- It is more resistant to strikes.
- It increases the strength of the concrete.
- It increases the impermeability of concrete.

Application Instructions

Surface Quality: It is very important that the floor is ready before the application of AYKS 301 Otherwise, cracks will occur in the concrete. Dirt surface to be applied; Squeeze should be done very well. For this reason, after squeezing the ground with rollers, it should be wetted through the sprinklers and then cross over the cylinder again. Surface tests such as layer test should be done to check that the hardener can be made. These procedures must be repeated until the ground is well pressed. In order to prevent the concrete to lose juice and to prevent cracks, sera nylon is laid on the surface. If AYKS 301ground hardener will be applied by pouring screed concrete on the existing concrete, after the concrete surface is cleaned, floats or monolithic screed application should be chosen according to the project needs. The surface should be roughened with various methods where necessary and cement sherbet should be removed. The existing concrete surface should be saturated with water at least one day before the application starts and free water should be prevented from leaving the surface. Application should be done on saturated concrete. Before the application, the ano should be formed in square form by planning according to the determined and the screed should be made according to these principles. If the box profiles will be used while anos are constituted, the mortar used for fixing should be removed when the screed is poured. Ano molds should be cleaned before each application and a AYKS 301 mold separator should be used to remove the edges of the screed concrete. Ano molds used when pouring screed concrete should be designed at the height of the screed. The fact that the molds to be used have a lamp with a tenon structure will prevent the concrete under loan from collapsing through the cold pointing sections.
Steel reinforcement to be used according to the project should be placed in place using concrete over. If the reinforcement is laid on the existing floor without using a rust share, it will not prevent the concrete tension and cause the ano to crack under load, since the reinforcement will not have any adherence to the screed concrete. If single layer of reinforcement is to be used, the reinforcement should be laid in the middle of the concrete thickness.

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Quartz Aggregate Dry Shake Surface Hardener

Reinforcement should not be carried out outside the ano's border. Reinforcement is to be solved with welded wire fabric, welded wire fabric should be laid on top of each other. Cold and crack control joints should be formed in order to control the shape and location of the reinforced concrete floor under load without creating cracks in the concrete. In order to the movements in these joints to occur only in the horizontal and in the desired direction, ano must be removed and must be connected to the ano formed. The remaining parts of the joint reinforcement outside the ano should be plastic pipe or hose and the other ano should be poured the concrete in this way. This application will prevent the vertical and longitudinal movements of cold joints during the movement of anos.
In monolithic screed application, AYKS 301 epoxy primer should be used to ensure adherence between old concrete and new concrete. Before taking the AYKS 301 cure, it is necessary to ensure that the surface is sanded sufficiently. If the old concrete moisture cannot be removed AYKS 301 moisture barrier primer should be preferred.
In floating screed applications, plastic sheets should be laid on the old concrete and the cement should be prevented from adhering to the old concrete.
Cracks that may occur in the screed concrete under faulty design and application and service loads will be reflected on the surface hardener.
The recommended concrete Compressive Resistance should be at least C25 according to the Turkish Standards Institute 206. The thickness of the screeds should be above 12 cm and the water/cement ratio should be above 0.45.
Surface Preparation: minimum 2 cm thick thermal insulating board is placed in, such as walls, curtain concrete around the floor to be applied to the surface hardener application. In the middle column, elevator partitions, partitions around the minimum 2 cm thermal insulating board is applied. By this means, a gap is created to allow the concrete to run. This allows the cap to dilate and shrink freely without cracking. The gaps left after the completion of the application should be filled with AYKS 301 1K or 2K.
When pouring concrete between ano, it should compress the concrete using a vibrated floating rule. The necessary adjustments must be made by using the control floating rule and wood float before the concrete surface is exposed to water. The water on the concrete surface should be swept with a long sleeved wooden floating rule. AYKS 301 should be sprinkled in such a way that it will not separate when applied. Base coat process according to the environment and weather conditions, when the concrete is on 0,5 -1,5 cm deep footprints should be applied after hard enough to remain. The material should not be poured on the ano as a heap, sprinkled as homogeneously as possible and corrected with a squeegee. If the material is poured onto the ano surface and spread with a squeegee, the material should be scraped off and cleaned from the surface where the first poured material remains thicker. In the first stage, 2/3 of total consumption should be sprinkled on the concrete surface and spread with the help of a squeegee or a machine. The spreading material should be expected to be moistened by taking the water of the concrete (color change) and the surface hardener should be coalesce with the concrete by making enough disc polishing (helicopter tray polishing). After that, the remaining 1/3 of the amount is sprinkled on the fresh concrete surface and polishing is done with the help of disc polishing. Honing process is continued until the intended surface quality is reached. The surface material spilled on the ano should be continuously with a spatula while disc polishing. Otherwise, the elevation difference between the two ano and the bad jointing appearance may occur. After the coarse polishing, the delicate polishing should be started, delicate polishing is the polishing with a knife. Knife polishing should be done until the desired brightness is achieved.
Curing Stage: after polishing, AYKS 301 material must be used to protect the concrete surface. AYKS 301 material increases the concrete strength value and decreases the rate of evaporation of water in the concrete and allows the concrete to make a socket with the amount of water available. Prevents shrinkage cracks and surface dust. Cure application should be made in summer and winter. After the concrete is hardened enough, ano's should be cut at least 4mm width and the joints should be formed. The joints created should be filled with AYKS 301 1K or 2K in order to prevent the negative effects such as cracks and dust from the joints.

Application Notes / Restrictions

- In order to obtain performance from the product, the application time of polishing must be determined very well.
- The application of surface hardener is done with the time varying according to the quality and type of concrete to be applied. When applying, should be paid attention to the socket stages of concrete.

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AYKS 301

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Quartz Aggregate Dry Shake Surface Hardener

- The product, may cause sensitization by skin contact. Safety gloves or goggles should be worn. Protective cream can also be applied to the hands before starting work. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Application should be avoided in windy, extreme cold and hot weather conditions.
- In cases where relative humidity drops below 40%, efflorescence may occur depending on the type of cement used in the concrete used.
- Joint cutting should be done as soon as possible, after the application. If it is cut after 3 days, it will be difficult to cut and concrete cracks will be seen on the surface.
- For AYKS 301 application, concrete ano, tray polishing, base coat and surface finish equipment for special applications, polyurethane sealant gun is required.
- Application time for surface hardeners is affected by every variable that affects the placement of concrete, and therefore varies according to dominant conditions.
- In mechanical applications with automatic ejector and laser screed spreader, the sprinkler process can start immediately after the concrete release to allow the surface hardener to wet.
- Compression with trowel can be started when the weight of the helicopter trowel is met by the concrete.
- In manual application, the surface hardener should be sprinkled after 3 to 5 mm without leaving any fingerprints.
- Periodically checking the status and development of concrete ensures the correct decision about the stages and turn of the application.
- Application of surface hardener should not be done in very windy or arid conditions.
- Some of the cement is replaced with volatile ash, concrete is more sticky and workability is low should not be used.
- Changes in concrete requirement such as water and cement content can cause slight tailing.
- Surface hardeners can make a difference in color based on the natural variety of concrete applied.
- To provide color consistency and continuity, the floor placement process should be done as clean and protected from the environment as possible.
- During the drying process, color variations are normal and this situation is expected. Each process must provide a **regular AYKS 301 aplication**.
- Right timing and polishing techniques are obligatory.

Technical Data

General Information	
Color	Grey, Red and Green
Shelf Life	12 months in dry environment in unopened packaging
Package	25 kg kraft bag
Application Information	
Outlay	4-8 kg/m²
Application Temperature	(+5°C) - (+30°C)
Cleaning Duration	4 hours (+ 20°C)
Performance Information	
Bending Resistance	≥ 9 N/mm²
Compressive Resistance	≥ 60 N/mm²
Abrasion Strength (According to the Taber method)	≤ 4,0 gr (H22, 1000 gr, 1000 circulation)
Fire Resistive	A1

Technical data are approximate values obtained from the laboratory study of Tekno Construction Chemicals for finished products obtained at +20°C air temperature and 50% relative air humidity.

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Onur Mah. T. Cemal Beriker Blv. Kiza İş Merkezi
A2 Blok no:437/3 İç Kapı No: 212 Seyhan Adana / Türkiye