



The Chemical Company

POZZOLITH® MR 26 K

Modified Lignin Sulphonate Based Water Reducing Mid Range Plasticizer Concrete Admixture



1305-CPD-0097
1305-CPD-0292
1305-CPD-0293

Description of Product

POZZOLITH® MR 26 K is a modified lignin sulphonate based, mid range water reducing/plasticizer admixture that improves workability and the mechanic properties of concrete by reducing water/cement ratio of concrete and enables concrete to quick set in cold weather.

Consistent With the Ministry of Public Works Pos. No: 04.613/1-A2 TS EN 934-2 Table 2: Water Reducing/Plasticizer Concrete Admixture ASTM 494 Type A: Water Reducing/Plasticizer Concrete Admixture Standards.

Fields of Application

- In the production of pumpable and non-pumpable readymix concrete.
- In the production of reinforced and plain concretes, light or normal weight concretes of all kinds.
- In all concrete where flowable consistency* is desired.

Technical Data

Structure of the Material	Modified lignin sulfonate based
Color	Brown
Density	1.11 - 1.17 kg/liter
Chloride Content% (EN 480-10)	< 0.1
Alkaline Content % (EN 480-12)	< 10

Obtained in +20°C, 50% relative humidity conditions

Features and Benefits

- Decreases the amount of water at least 5-12% by weight compared to concrete without admixture.
- Increases early and final strengths compared to concrete without admixture.
- Enables lower water/cement ratio or high workability in the same water/cement ratio and easy pumpability compared to concrete without admixture.
- Can be used for multipurpose. Minimizes admixture variety because of its normal plasticizer effect in lower doses and super plasticizer effect in higher doses.
- Enables high strength, durability and low permeability due to low water/cement ratio compared to concrete without admixture.
- Enables easy workability of concrete and reduces segregation risk.
- Gives perfectly smooth surface finishing in concrete placed in molds.
- Makes it easier to obtain surface finish.
- Its sensitivity is low against the differentiation of concrete's constituents.
- **POZZOLITH® MR 26 K** does not contain chloride.

Working Mechanism of Admixture

Admixtures generally go into reaction only with the binder. When the admixture is added to the concrete, it is absorbed by the particles of the binder. The particles of the binder push each



POZZOLITH® MR 26 K

other by electrostatic force. Thus, the desired workability is obtained by less amount of water. Proportional with the decrease of mixture's water amount, mechanic strength increases.

Application Procedure

Binder (cement-micro silica-fly ash) and aggregate must be mixed until a homogenous mixture is obtained. After adding 50%-70% of the water to be added to the mixture, **POZZOLITH® MR 26 K** must be added to the mixture along with the remaining water. **POZZOLITH® MR 26 K** must be mixed for 60 sec. or for the duration determined in laboratory experiments in the mixture for a homogenous diffusion.

Dosage

POZZOLITH® MR 26 K is suggested to be used as 0.4 - 1.2 kg for 100 kg binder (cement-micro silica-flyash). The dosage to be used must be determined beforehand by laboratory experiments according to concrete class and properties. **BASF Yapı Kimyasalları San. A.S.** Technical Service must be consulted for detailed information.

Compatibility

POZZOLITH® MR 26 K can be used with the following materials:

1. Can be used with all cement types.
2. Can be used with mineral admixtures like silica, flyash and slag. .
3. Can be used with air entraining **Micro Air® 200** to increase Freezing - Thawing resistance.
4. Used against fissures from plastic shrinkage with synthetic fibers **Meyco® FIB. SP 530/540/550** and steel fibers.
5. In environments with high temperature and wind, must be used with a suitable curing membrane or material like **Masterkure® 101, Masterkure® 107, Masterkure® 176** or **Masterkure® 181** to prevent the water of the mixture inside the concrete from evaporating.
6. In cold climate conditions, it is used with **Pozzolith® 42 CF** to accelerate the setting of concrete by increasing hydration temperature.

7. Can be used with **Rheobuild® REDOZ N** admixture to increase the slump of the concrete in construction sites.

Watchpoints

- Concrete design and admixture dosage must be determined by prior laboratory trials according to concrete class and properties.
- The determined binder (cement-micro silica-fly ash), at the end of laboratory trials, coarse and fine aggregate must be mixed until a homogenous and dry mixture is obtained. If admixture is added to the dry mixture before adding mixing water, then it will be absorbed by the fine aggregate and uniform distribution will not be obtained. Even if all the mixing water is added on top of this, aimed concrete class and properties cannot be obtained. Since the mixture will need extra water, the water amount in design values will be exceeded and the concrete's mechanical properties will be below the aimed value. For this reason, concrete admixtures must not be added directly to the dry mixture.
- The admixture amount in the mixture is calculated by multiplying the sum of cement and secondary binders (such as micro silica-flyash-slag) in the mixture by admixture dosage ratio.
- If higher doses are used than the suggested dosage, then set times of the mixture can increase. In such cases, reinforced concrete has to be cured by keeping it humid during stripping.

Packaging

230 kg drum
1000 kg tank
Bulk

Storage

Must be stored in original packing, in +5°C environment and protected from direct sunlight. If the material freezes because of storing in

POZZOLITH® MR 26 K

undesirable environments, it must be thawed by keeping it in room temperature without direct heating, and mixed by mechanical methods until it becomes homogenous. Pressured air must not be used when mixing.

Shelf Life

12 months after the production date under appropriate storing conditions. Opened packages can be used throughout the shelf life if the package cover is well closed.

Health and Safety Precautions

Work cloth, protective gloves, goggles and masks concordant with Work and Worker Health rules must be used during the application. Avoid contact to skin and eyes during storing and application. If such a contact occurs, it must be washed by soap and plenty of water. Consult a physician urgently if swallowed. Food and drink must be kept outside the application areas. Must be stored away from children. Please look at the Material Safety Data Sheet for detailed information.

** Flowable consistency: Although has the same water/cement ratio with the reference concrete of approximately 7 cm slump, easily flowable concrete with slump S3-S4 according to TS EN 206-1.*

Disclaimer

This information given here is true, represents our best knowledge and is based not only on laboratory work, but also on field experience. However, BASF Yapı Kimyasalları San. A.S. is only responsible from the quality of the product. BASF Yapı Kimyasalları San. A.S. cannot be hold responsible from the results caused by applications of the product not in accordance

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