

# Tekno RTR

## Set Retarding Admixture For Concrete



Public Pos. No: 04.113/2

**Product Description** It is an additive retarding setting time in concrete and mortar.

### Areas of Usage

- It's used in all types of concrete and mortar where medium and long-term setting delay is desired,
- In situations where quality of all types of concrete is desired at high temperatures,
- In large volume concrete castings,
- In situations where installation conditions will take a long time,

### Features and Benefits

- It prolongs the set period by control.
- Reduces hydration heat, reduces thermal shrinkage cracks.
- Allows to cast concrete in hot weather.
- Does not affect final strengths, improves workability.
- Facilitates casting process.

### Application Instructions

Surface Preparation: It should be preferred when screed, plaster or concrete is to be cast where the ambient temperature is highest. Morning or evening hours are the best for concrete casting. Additional precautions are necessary to be taken in advance to protect the surface from frost, rain, dew and rime.

Surface and Ambient Temperature: TEKNORTR may not be sufficient at temperatures above (+5°C) - (+35°C), (+35°C). It is absolutely necessary to take additional protective measures. As an additional protection; cooling the concrete mixture water depending on the ambient and the concrete temperature, using ice particles, wetting the mold, choosing modified cements with late setting, using fly ash, etc. are required.

The air temperature, the cement type and the freshness affect the set time. Appropriate dosing for TEKNORTR is determined by preparing test specimens at the construction site, mixing water or fresh concrete is added at appropriate dosage.

The use of TEKNOR TR in concrete:

The mixing properties of a concrete sample decided to be cast on the construction site are as follows.

General Information	
Concrete Class	C 25
Maximum Grain Diameter	22 mm
Water Cement (CEM 1 42,5 R)	181 kg
Water / Concrete (W / C) Ratio	370 kg
Crushed Sand (0-5 mm)	0,49
Stone Dust	454 kg
Aggregate (5-12 mm)	335 kg
Aggregate (12-22 mm)	468 kg
Superplasticizer	454 kg
Air Content	3,7 kg
Slump	% 1,516 cm
Determination of the amount of TEKNOR TR to be used Up to 0.25 - 2% of binder amount.	
In the example 1% of the binder is received. For 370 kg cement	3,7 kg

TEKNOR TR can be added in concrete in the construction site or ready mixed concrete production plant. After TEKNO RTR is added in concrete, it should be stirred for 5 minutes at high speed. Then the concrete should be placed in the mold.

## Application Notes / Restrictions

- During the application of the product, work clothes suitable for occupational health and safety rules should be worn. Suitable glasses and mask should be used.
- Instead of CEM I cement, we recommend using modified cement with low hydration heat.
- In the case of concrete casting in low temperatures below +35°C, the measures recommended in the standard are required.
- Mixed water of plaster, screed or concrete should be reduced by about 3-5%.
- Pretesting concrete casting is recommended.
- It must be protected after application against adverse weather conditions such as direct sunlight, high air temperature (above +35°C), rain and frost. Hands should be cleaned thoroughly with water and detergent before concrete or mortar is fully cured and hardened.

---

**Technical Data**

General Information	
Color	Light Yellow
Density	1,1 kg/l
Consumption	0.25% to 2.00% of the cement weight
Packaging	30 kg bin
Shelf Life	12 months in unopened original packaging
Chlorine content (EN 480-10)	< 0,1 %
Alkali content (EN 480-12)	< 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.