

# DARAGROUT® EXPAND (ST)

Non-shrink grout admixture for mortar and concrete with strong swelling effect Additive for non-shrink grout acc . to EN 934- 4:T2

## Fields of Application

DARAGROUT EXPAND (ST) is predominantly used for the production of swelling mortars and concretes. Swelling concretes secure an effective filling of larger cavities, e.g. filling of larger joints between construction parts, filling of brittles from rock formations or constructions, casting of pipe ducts such as for drinking water purification plants, as well as for underpinnings in foundations.

DARAGROUT EXPAND (ST) is also used for the manufacture of cementitious mortars with swelling properties for filling, injection into smaller voids for tasks in building and civil engineering constructions or underground structures. Possible applications are above all injection, sealing and strengthening of cracks, fissures, porous patches, filling of joints between construction parts as well as the casting of cavities underneath floor screeds.

#### **Technical Data**

Effective Component	Aluminium powder
Form	Powder
Homogeneity	Homogeneous (tested acc. to DIN V 20000 -1 01, annex A)
Colour	Light grey
Dry material content	> 95.0 m %
Bulk Density	920 ± 20 kg/m <sup>3</sup>
pH- value	8.0 ± 1 (3% suspension)
Total chloride content	< 0 .10 m%
Water-soluble chloride content	< 0.10 m%
Alkali content	approx. 0.5 m %
Storage	Keep dry and well closed in original containers
Recommended Dosage	0.2 0 - 2.00 m% of cement
Delivery Form	25 kg sacks; 25 kg boxes (SO bags per 500 g)
Physiological effect	May irritate skin and eyes; see Safety Data Sheet
Shelf-life	Approx. 2 year in closed original containers



#### Properties/Mode of Action

Compared to unmodified concretes or mortars, DARAGROUT EXPAND (ST) allows a reduction of the water requirement, increases the flowability and reduces bleeding and segregation. Workability and flowability are significantly increased by using the product which makes for an easier access even into smallest cavities.

DARA GROUT EX PAN D (ST) forms micro air bubbles in the plastic cement gel in order to compensate the settlement by increase in volume. Swelling is finalized after 2-4 hours depending on ambient temperatures and proceeds slowly with little pressure so that the grout can encase all surrounding surfaces completely and fill the smallest voids. The formation of pores that effects the swelling is to be considered in advance by incorporating a strength reserve.

#### Dosage and Use

Best results are obtained when DARAGROUT EXPAND (ST) is added as the last component to the mix after about half of the

total mixing time. However, it can also be added to the concrete or mortar together with the gauging water.

# Special Information

The product is suitable for use in pre- stressed concrete. When using non-shrink grouts in combination with chromate-reduced cements a different setting and hardening may occur.

Preliminary tests according to official national standards are always required before use!

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