DARAGROUT EXPAND (ST) QUELL- TRICOSAL (ST)

Non-shrink grout admixture for mortar and concrete with strong swelling effect.

Additive for non-shrink grout acc. to EN 934-4:T2

#### **Product Specs**

Effective ComponentAluminium powderFormPowderHomogeneityHomogeneous (tested acc. to DIN V 20000-101, annex A)ColorLight greyDry Material Content> 95.0 m%Bulk Density920 ± 20 kg/m3pH-value8.0 ± 1 (3% suspension)Total Chloride Content< 0.10 m%		•
HomogeneityHomogeneous (tested acc. to DIN V 20000-101, annex A)ColorLight greyDry Material Content> 95.0 m%Bulk Density920 ± 20 kg/m3pH-value8.0 ± 1 (3% suspension)Cotal Chloride Content< 0.10 m%	Effective Component	Aluminium powder
HomogeneityDIN V 20000-101, annex A)ColorLight greyDry Material Content> 95.0 m%Bulk Density920 ± 20 kg/m3pH-value8.0 ± 1 (3% suspension)Total Chloride Content< 0.10 m%	Form	Powder
Dry Material Content> 95.0 m%Bulk Density920 ± 20 kg/m3pH-value8.0 ± 1 (3% suspension)Total Chloride Content< 0.10 m%	Homogeneity	
Bulk Density920 ± 20 kg/m3pH-value8.0 ± 1 (3% suspension)Total Chloride Content< 0.10 m%	Color	Light grey
pH-value8.0 ± 1 (3% suspension)Total Chloride Content< 0.10 m%	Dry Material Content	> 95.0 m%
Total Chloride Content< 0.10 m%	Bulk Density	$920 \pm 20 \text{ kg/m3}$
Water-Soluble Chloride Content< 0.10 m%	pH-value	$8.0 \pm 1$ (3% suspension)
Chloride Content < 0.10 m%   Alkali Content Approx. 0.5 m%   Storage Keep dry and well closed in original containers   Recommended Dosage 0.20–2.00 m% of cement   Delivery Form 25 kg sacks; 25 kg boxes (50 bags per 500 g)   May irritate skin and eyes:	<b>Total Chloride Content</b>	< 0.10 m%
StorageKeep dry and well closed in original containersRecommended Dosage0.20–2.00 m% of cementDelivery Form25 kg sacks; 25 kg boxes (50 bags per 500 g)May irritate skin and eyes:		< 0.10 m%
Storageoriginal containersRecommended Dosage0.20–2.00 m% of cementDelivery Form25 kg sacks; 25 kg boxes (50 bags per 500 g)May irritate skin and eyes:	Alkali Content	Approx. 0.5 m%
Delivery Form25 kg sacks; 25 kg boxes (50 bags per 500 g)May irritate skin and eyes:	Storage	
(50 bags per 500 g)	<b>Recommended Dosage</b>	0.20–2.00 m% of cement
Physiological effect May irritate skin and eyes;	Delivery Form	
see Safety Data Sheet (SDS)	Physiological effect	
Shelf-lifeApprox. 2 years in closed original containers	Shelf-life	

# **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.

# **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.

Daragrout Expand (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!

#### KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY

All information provided by NYCON Corporation concerning NYCON products, including but not limited to, any recommendations and advice relating to the application and use of NYCON products, is given in good faith based on NYCON's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with NYCON's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of NYCON's control are such that NYCON assumes no liability for the provision of such information, advice, recommendations or instructions related to its products. The user of the NYCON product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

NYCON reserves the right to change the properties of its products without notice. All sales of NYCON product(s) are subject to its current terms and conditions of sale which are available at www.nycon.com or by calling 800-456-9266.

Prior to each use of any NYCON product, the user must always read and follow the warnings and instructions on the product's most current

Technical Data Sheet, product label and Material Safety Data Sheet which are available. Nothing contained in any NYCON materials relieves the user of the obligation to read and follow the warnings and instruction for each NYCON product as set forth in the current Product Data Sheet, product label and Material Safety Data Sheet prior to product use.

NYCON warrants this product for one year from date of shipment to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PUR-POSE. NYCON SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. NYCON SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

