

TECHNICAL PAMPHLET

CR Type N

concrete surface retarder – negative process

PROPERTIES

CR Type N is a solvent-containing concrete surface retarder, ready to use, for the manufacture of exposed aggregate concrete by negative process. Yielding various elutriation depths, the following grades are available:

CR Type N grade

	colour	grain size	elutriation depth
Nano	beige	0 - 3 mm	approx. 0,1 mm
Micro	turquoise	0 - 3 mm	approx. 0,2 mm
01	blue	0 - 4/8 mm	approx. 0,5 mm
02	brown	2 - 4/8 mm	approx. 1,0 mm
10	green	4 - 8/10 mm	approx. 1,5 mm
25	yellow	4 - 8/10 mm	approx. 2,0 mm
50	red	6 - 9/12 mm	approx. 2,5 mm
80	grey	8 - 11 mm	approx. 3,0 mm
100	mustard	8 - 16 mm	approx. 3,5 mm
130	white	12 - 16 mm	approx. 4,0 mm
200	orange	16 - 22 mm	approx. 5,0 mm
300	red-violet	16 - 22 mm	approx. 6,0 mm
400	blue-violet	18 - 25 mm	approx. 7,0 mm

The elutriation depths are typical guide values and depend on the cement class, the water/cement value, the shape of aggregates and the grain-size distribution. To determine the most appropriate grade, please contact our application engineers.

APPLICATIONS

CR Type N can be used for the manufacture of exposed aggregate concrete parts, such as façade claddings, noise protection walls, gardening or concrete ware. It is highly convenient for architectural concrete or elements demanding particularly difficult production conditions.

APPLICATION BENEFITS

CR Type N is available in twelve grades, easily distinguishable by their colours. The product is handily stirred up. It is particularly economical since it

needs to be applied only once per use. Furthermore, the moulds can be cleaned with minimal effort: when dried, the residues are simply swept off.

CR Type N

Product 04126

PROCESSING

Before processing, CR Type N must be stirred up thoroughly. It is supplied ready for use and must not be diluted with further solvents. CR Type N is best applied onto the mould evenly and sparingly with a short nap paint roller. The concrete can be cast after a short drying period (15 to 30 minutes, depending on the temperature and ventilation).

The concrete composition, the course of manufacture and time, the element's thickness and the setting temperature must be established in a preliminary test under operation conditions. Segregation or too quick setting is to be avoided. The best setting time is approx. 1 hour, the best vibration period must be determined experimentally. Earliest heating of the formwork is 2 hours after compacting.

The data thus gained must be transferred to the production process. Unavoidable changes of parameters can usually be compensated by using another grade of CR Type N or by adjusting the concrete composition or the processing parameters.

When using new, plastic coated formwork, the surface's pH-level has to be checked. In case of alkaline surfaces, a neutralization of the formwork is recommended before the first application of CR Type N.

ELUTRIATION OF THE ELEMENTS

Elutriation is usually possible after 24 hours. However, the elements should remain in the formwork for at least 8 hours. After a longer setting time, e. g. 48 or 72 hours, elutriation is still possible, but within the same series the further elutriation rhythm must be kept constant for the entire production. In singular cases, the elements can be exposed to air for 2 to 8 hours to reduce the elutriation depth or to adjust changes of the production conditions.

The most economical procedure of elutriation is using a high-pressure hose. Dry brushing and subsequent washing is also possible.

CLEANING OF EQUIPMENT

For the cleaning of the tools and the equipment, use PU Thinner.

SPECIAL REMARKS

Especially electrical equipment that is used when processing CR Type N should be explosion-protected. Recommended gasket material is Teflon.

CONSUMPTION

Approx. 80 to 200 g/m², depending on the type of structure.

PACKAGING SIZES

cans: 20 kg

STORAGE

Store in a dry, well-ventilated place at room temperature. Do not expose to direct sun irradiation. Keep away from any sources of ignition, do not smoke. CR Type N is storable for 12 months from the date of manufacture when kept in the closed original packaging. Opened drums must be closed airtight right after use.

SAFETY

CR Type N contains a flammable mixture of hydrocarbons. Provide sufficient ventilation in the working place. Keep away from heat, sparks, open flames or any other ignition sources. Do not smoke! Protect skin and eyes from material splashes. Please consult the relevant safety data sheet and attend to the indications on the label of the package regarding the Dangerous Goods Regulation. This pamphlet is intended solely as an application directive. It does not claim to be binding and valid for all modes of application. A preliminary test under operation conditions is highly recommended.

This pamphlet replaces all previously published pamphlets concerning CR Type N, stating them as no longer being valid.