



Very
High
Durability
Repair &
Prevention
Systems



Certified Quality System since **FEBRUARY 1993**

From project to Jobsite

RAPI-tec® aeroslab/conc

TECNOLOGY FOR SCREEDS AND CONCRETE WITH VERY FAST HARDENING AND VOLUMETRIC STABILITY

Description RAPI-tec® aeroslab/conc is a premixed powder (supplied in bags of 20 kg or big bags of 500/550 kg) for the production of concrete or screed for airport or industrial floors, joints or other structures that should be accessible after very short period (technology RAPI-tec®). The deformation energy of the concrete RAPI-tec® aeroslab is about 5 times higher compared to a traditional concrete.

Proportions The indicative proportions for the packaging of the screed or concrete are the following:

Components	Concrete Kg/m ³	Screed Kg/m ³
RAPI-tec® aeroslab/conc	500	550
Aggregates 0,1-16 mm	1790	0
Aggregates 0,1-10 mm (can be supplied by us)	0	1750
FIBRE-tec EST	7	7
Report active w/c	≤ 0,35	≤ 0,35
Consistency	S4-S5	S4-S5

Application RAPI-tec® aeroslab/conc is used for the replacement or the construction of airfields, or floors (even without reinforcing bars), for construction or renovation joints in motorway construction or restoration of constructions: **all applications with the traffic or structural ability after 3-4 hours from casting.**

- Floors pavements (repair or new)
- Floors of Freight areas (repair or new)
- Slabs of concrete bridges or road
- Wherever structural viability and / or traffic is needed only 2-4 hours after casting

Preparation Environment application / substrate:

- Support clean, rough, free of dust, no grease, oil, spalling parts
- Temperature of ≥ 5°C

Mixing:

- Equipment: vertical axis mixer
 - The aggregates are mixed with the powder and water to obtain a homogeneous mixture.
- Mixing time: approximately 10 min.
- The fibres are added slowly. The mixing proceeds until perfect dispersion of the fibers in the mixture.
- Mixing time: about 2 minutes

Properties

Pot life at 20°C	25 min.
Initial setting at 20°C	30 min.
Specific weight	2.430 kg/m ³
Compressive strength after 3 hours	24 MPa
Compressive strength at 28 days	75 MPa
Flexural strength after 28 days	8 MPa
Modulus of elasticity at 28 days	38 GPa
Fracture energy after 28 days	~ 500 N/m
Spalling after 28 cycles frost/thaw with chlorides	≤ 80 g/m ²

Application Cast on the jobsite and finish the concrete by vibrating.

The application of curing compound (**CURING COMPOUND UR 19**) is recommended. Otherwise provide for wet curing beginning as soon as initial setting is obtained (geotextile cloth dampened + PE) and up to the time of opening to traffic. Recommended is also the use **INSULATOR-tec 10** as thermal protection in case of temperatures below 10°C.

remark Information according to 2003/53/CE:

Storage: 6 months in original packaging, unopened, kept in a dry, protected at temperatures between +5°C and +35°C. Do not use the content of open bags if you notice lumping of the powder. There are no known processes of degradation of the fibres over time.

The above data are based on our actual and most experienced practical and laboratory knowledge and the results are collected from application of the product in different situations. Tecnochem Italiana does not assume any responsibility regarding inadequate or negative performance as a result of improper use of the product or for defects deriving from factors or elements other than the quality of the product including improper storage. The technical characteristics and performance mentioned in this datasheet are updated periodically. The revision dates and number of revision of the datasheets are listed in the table below. Eventual variations are traceable on our website www.tecnochem.it where the most updated datasheets can be retrieved.

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