



Products, technologies
and services for the
restoration of monuments



Certified Quality System since **FEBRUARY 1993**

From Project to Jobsite

SPARTYTE® COT-col

MINERAL PREPARATION FOR THE REPRODUCTION BY CASTING OF CLAY ARTEFACTS

Description SPARTYTE® COT-col are formulations composed out of mineral inorganic components, which, after mixing with water, can be used for the reproduction of almost all ornaments in of clay work. The product is available in different types, depending on the type of application or colour. The different types are distinguished by a final code or number.

- Advantages**
- Good mechanical and physical properties, colourfast also in severe climatic circumstances and UV.
 - The flow consistency of the product guarantees a perfect casting even for difficult and complex shapes and forms.
 - The product can also be formulated towards a piece of stone from the jobsite, after analyses by our laboratory, of both the pigmentation and the physical-mechanical properties of the existing stones.
 - SPARTYTE® COT-col formulation always contains in its particle size distribution, a predominant proportion of "coccio-pesto" from which have been extracted and/or inhibited soluble salts as possible source for efflorescences later.
 - The structural binder (and the resulting mechanical strength) is based primarily on the formation of hydrated silicates through reactions with the active silica contained in the particular "coccio-pesto".
 - The shrinkage is compensated in accordance with the needs for special applications: in substance can induce in the formulated expansions of different entities that can therefore compensate for the withdrawal partially, totally or they can achieve different levels of expansion controlled residual.

Field of application Wherever there is a need for faithful reproduction of clay artifacts brickwork of particularly valuable. These reproductions are made by casting in moulds or formwork, and can be executed both outside or on the jobsite.

- Use**
- We recommend performing casts in moulds of silicone rubber contact possible. The dolly can be executed in plaster or polyester resin.
 - Avoid a gypsum form if the surface is not completely closed and there is a possibility for water absorption of the product with the contact surface. The applied product will, in case of water loss by absorption, be compromised in strengths.
 - Keep the application wetted for at least 2-3 days after the demoulding.
 - For optimal protection and aesthetics together with a better conservation of the repaired surface and to reduce dirt or smog pick-up on the surface, the application should be protected with impermeabilizzante WP-55/LP. If desired a protective surface consolidation can be done with TECNOSOLID 82 as a second treatment (first test if there is no discolouration of the surface). In the case a better colour uniformity or better aesthetics with the existing part of the structure is desired, apply VELART, a transparent, protective coating. This can be formulated "ad hoc" in different shades of colour.



Storage Information according to 2003/53/CE:

Storage: 12 months in original packaging, un opened, kept in dry and protected area between temperature from +5°C and +35°C.

Packaging Pails of 15 kg (product consists out of powder and broken brickwork, in a proportion that is depending on the colour. This brickwork is packed in a separate bag because of its humidity). Packaging is varying depending on the colour!

- Technical properties (typical values)**
- Mixing time: not less then 4-5 minutes and depending on the equipment used.
 - Workability: circa 15 minutes.
 - Typical mechanical values:
 - The mechanical strengths will vary depending on the application and can reach the desired values. The typical mechanical values can be considered as follows:

	Compressive strengths N/mm ²	Flexural strength N/mm ²
After 1 day	4-12	1,5-3
After 1 week	15-25	3,5-5
After 1 month	25-40	6-10

Note: 1 N/mm² = 10,2 Kg/cm²

- Adhesion to the support 1÷2 N/mm²
- Dimensional Stability If desired, in function of the application, expansion or minimal shrinkage can be obtained (< 100 µ/m)

Consumption Kg 2 approx. per litre of casting to be done.

Safety indications Read carefully the instructions on the packaging or read the Material Safety Datasheet related to the product before applying.

The above information is based on our best experiences and lab results and on results of the application of the product in various fields. Tecnochem Italiana is not responsible for negative performances due to not proper use of the product or for defects due to elements not connected with the quality of the product included wrong storage.

Technical characteristic in this technical data sheet are up-to-dated periodically .Revision date of this technical data sheet is indicated below. Changes of this data sheet can be found in our web-site www.tecnochem.it where you can find the same technical data sheet updated in real time.