

# *Terra sigillata*







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Terra Sigillata is a special kind of engobe, used for example in Ancient Greece. The matte gloss finish is a defining property of Terra Sigillata. This engobe relies on the fineness and the spreading of clay particles after application. Course clay particles disturb its final look.

## Recipe:

- 1 kilogram of clay

A plastic type of clay. Sibelco clay powder RB03833 (red-firing Terra Sigillata) and WWB111 (white-firing, can be coloured with oxides or body stains) give good results.

- 20 grams of Dolapix PC 67 (deflocculant)

- 1,5L water

1. Measure right amount of water in a clean bucket.

2. Add Dolapix PC 67, once it's dissolved add the clay powder while stirring the mixture thoroughly.

3. Continue stirring until a smooth texture is achieved.

4. Put the bucket away.

5. The course/heavier clay particles will sink and form a layer on the bottom of the bucket.

6. Carefully pour the cloudy substance into another clean bucket leaving the sunken residue, after hours or days (depending on the preferred fineness/glossiness). Waiting three days gives a beautiful result.

7. This mixture is your Terra Sigillata (about 0.6kg per kg clay).

8. The sunken residue left in both buckets can be used in throwing clay, or discarded.

Checking if the mixture came out right can be done by examining the weight of a litre of your Terra Sigillata. Good Terra Sigillata weighs 1260gr/l.

Application can be done by brushing or spraying, on un-fired work for the best result. It is important to apply it thinly. Fired items are often more porous, these will absorb the Terra Sigillata as it is applied, making the layers too thick.

The surface will get wet, since the fine clay particles allow very little water through. Several layers can be applied, but one thin layer is enough for an opaque result.

Attention: Oxides sink quickly, stir well before application.

## Drying and firing

Items must be properly dried before firing. This will take a bit longer in comparison to normal engobes, due to the fine clay particles. Place the items into the kiln, leaving enough space for them to increase in size (until about 900°C, then shrinking starts). Always test your work before starting an entire production. The firing temperature lies between the bisque-firing and glaze-firing temperatures. About 1020°C when Terra Sigillata was applied to bisque.

## Possible issues

- Flaking/hairline cracks: Terra Sigillata has been applied too thickly.

- Rough final result, no gloss: not enough time for particles too sink.

- Too little product after mixing: Has the right kind and amount of deflocculant been used?

