of its preparation that would also allow the ecological use and consumption of plastic waste. The result of this effort is the method of preparing a cement plastic mixture described in the present invention.

Summary

In an aspect of the present disclosure, there is provided a method of preparing a cement plastic mixture, wherein the cement plastic mixture comprises a basic mixture of plastic crumb, cement and superplasticizer in the mentioned percentage range that add up to a total of 100 % weight of the basic mixture and,

characterized in that in the first step:

29% of weight to 43% of weight of plastic crumb,

56% of weight to 69% of weight of cement,

4.0% of weight to 14.0%, of weight of water

are mixed in a mixing device

preferably at a temperature 8°C to 25°C for preferably 3 minutes to 4 minutes;

- In the second step

1.0% of weight to 2.0% of weight of superplasticizer,

and at least one of the additional components is added:

0.4% of weight to 0.9%of weight of solidification accelerator,

0.04% of weight to 0.07% of weight of ARC synthetic fibers,

0.02% of weight to 0.08% of weight of paint,

and everything is mixed preferably for 6 minutes to 10 minutes

wherein the water and the additional components are provided in the mentioned percentage on top of the weight of the basic mixture.

The essence of the invention

The above-mentioned problem of cement mixtures is solved by the proposed cement plastic mixture which may be prepared in a specific way according to the invention. For the purposes of the present invention, the term “cement plastic mixture” may be understood as meaning a composition of the following composition. It may be a mixture that contains crushed plastics preferably which cannot be further recycled. It is possible to use plastics of all kinds preferably with a fraction of 1 mm to 20 mm, or

even a higher fraction, or chopped plastic strips, except for plastic pellets. It is also cement, e.g. Portland gray or white with a strength of 32.5 MPa to 52.5 MPa.

Portland grey and Portland white represent historical names for a cement which may be used as a synonym for hydraulic binder.

Finally, a superplasticizer may be used, e.g. Melment, a superplasticifer based on melamine formaldehyde resin with a density of 20/40, and water. According to the present invention the superplasticizer may be based on or may comprise or may be made from melamine formaldehyde and/or may fulfill the EN 934-2 2019+A1:2012 standard. The mixture may further contain silica sand with a fraction 0.3 mm to 2.0 mm and/or solidification accelerator, e.g. Betodur A5, thus a chloride free concrete and/or synthetic fibers, e.g. ARC 42/30 mm, namely alkali resistant (AR) Glass Fibers, which may be designed specifically for use in concrete and/or powdery paint and/or silica fume (microsilica) SiO_2. These components of the mixture may be present in the following percentage of the individual components:

29% of weight to 43% of weight of plastic crumb,

56% of weight to 69% of weight of cement,

1.0% of weight to 2.0% of weight of superplasticizer adding up to 100 % and representing a basic mixture.

At least one additional additive component is added to the basic mixture, comprising or consisting of:

6.0% of weight to 12% of weight of silica sand, and/or

0.4% of weight to 0.9% of weight of solidification accelerator, and/or