Annex 13

Development of Antimicrobial cement additive

Microbes are present in millions in air, water and surfaces. For floors when floor cleaners are used it removes bacteria from the surface for sometimes after that they come back again. But if floor itself will be antibacterial it gives constant protection against bacteria. CSIR-IMMT has developed antimicrobial formulation for cement additive when it is mixed with cement the cement and consecutively the floor made out of it also becomes antimicrobial. It gives constant protection against bacteria. It can be used in household like kitchen, washroom and toilet and for public it can be used for hospital flooring, public toilet flooring where there is chance of major infections more particularly in rural areas where the flooring is still made up of cement not tiles like urban area.

Constraints faced: When anything is mixed with a normal cement the BIS standard value is altered. So as the change observed in settling time. Though its showing higher impact strength along with antibacterial property. But the delay is settling time is creating a disturbance for the cement vendors as its not matching the BIS standard.

My query: If something new is mixed with a BIS standard cement then it's a new cement itself. It should have its own BIS standard of settling and other properties which should not be compared with an existing one and make this wonderful product an unfit one. Finally, it is also giving a very good casting with delayed settling time. But if one is getting an antibacterial property in a washroom or inner liner of the water tank, does some hours of settling time matters so much to a costumer? I don't think so.

Kindly help me to get a new BIS standard for the new cement mixture so that it can be sold with its BIS standard.

CSIR-IMMT has a patent in this area;

Indian Patent-**Granted**

A process for the preparation of thermally treated composite of Zn-Al layered double hydroxide having antibacterial activity

Barsha Dash, Sony Pandey, Geetanjali Mishra

Indian patent number- 2893 DEL 2013, Dt.30.09.2013

Granted : 349714, 21 October 2020

Publication

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