Abstract

To provide an admixture that enables imparting crack self-repairing properties and resistance to sulfuric-acid deterioration uniformly throughout an entire cement-based material, a cement composition containing the admixture, a hardened product thereof, and a method for producing a cement-based material using the admixture.

The invention provides a liquid admixture for cement comprising a first component containing microorganisms that generate carbon dioxide through metabolism and a second component containing a proliferation inhibitor of bacteria having sulfur-oxidizing capability. According to the present invention, crack self-repairing properties and resistance to sulfuric-acid deterioration can be imparted uniformly to the entire hardened product of the cement composition. The invention further provides a cement composition containing the liquid admixture for cement, a hardened product thereof, and a method for producing a cement-based material using the liquid admixture for cement.

[Selected Drawing] Fig. 8