

Title (en)

Homogeneous mixtures comprising alkali silicate and alkali carbonate.

Title (de)

Homogene Mischungen aus Alkalisilikat und Alkalikarbonat.

Title (fr)

Mélanges homogènes contenant silicate alcalin et carbonate alcalin.

Publication

EP 0667391 A3 19960710 (DE)

Application

EP 95101735 A 19950209

Priority

DE 4404693 A 19940215

Abstract (en)

[origin: EP0667391A2] Homogeneous crystalline or partly crystalline alkali metal silicate/carbonate mixts. (I) have the compsn. $M_2Si_xO_{2x+1} \cdot yNa_2CO_3 \cdot zH_2O$, where M = Na or K, $x = 1.5-3$, $y = 0.025-1$ and $z = 0-1$, and have a Ca-binding power of at least 50 mg CaO/g anhydrous (I) at 20 degrees C. Also claimed is the prodn. of (I) by dissolving an alkali metal carbonate or bicarbonate in an alkali metal silicate soln., or adding an alkali metal carbonate or bicarbonate soln. to an alkali metal silicate soln. to form a homogeneous soln. with a silicate/carbonate ratio as above; converting the soln. to a solid prod.; and heating the prod. at 200-550 degrees C until the H₂O content is as above. Also claimed is a process for softening water contg. Ca and/or Mg ions, comprising adding (I) to the water.

IPC 1-7

C11D 3/10; **C11D 3/08**

IPC 8 full level

C11D 3/08 (2006.01); **C11D 3/10** (2006.01)

CPC (source: EP)

C11D 3/08 (2013.01); **C11D 3/10** (2013.01)

Citation (search report)

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Cited by

US5854192A; WO9614267A1

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