

Title (en)

METHOD FOR CONTROLLING PARTICLE SIZE IN THE CRYSTALLIZATION OF DIMETHYLOL ALKANOIC ACIDS

Title (de)

VERFAHREN ZUR STEUERUNG DER PARTIKELGRÖSSE IN DER KRISTALLISATION VON DIMETHYLOLALKANSÄUREN

Title (fr)

PROCEDE DE REGULATION DE LA GRANDEUR DES PARTICULES DANS LA CRISTALLISATION D'ACIDES DIMETHYLOLALCANIQUES

Publication

EP 1284953 A1 20030226 (DE)

Application

EP 01949354 A 20010521

Priority

- DE 10026139 A 20000526
- EP 0105819 W 20010521

Abstract (en)

[origin: WO0190041A1] The invention relates to a method for the selective crystallization of poly- or monomethylol alkanolic acids of the general formula (I), wherein R is the same or different and represents a methylol group or a substituted or unsubstituted aliphatic hydrocarbon, with an essentially monomodal particle size distribution. This particle size distribution is achieved by crystallization in a temperature interval of from 85 DEG C to 50 DEG C observing a cooling rate of < 10 K/h, resulting in substantially trigonal-symmetric crystals. The invention further relates to a method for the selective crystallization of poly- or monomethylol alkanolic acids of the general formula (I), wherein R is the same or different and represents a methylol group or a substituted or unsubstituted aliphatic hydrocarbon, with an essentially monomodal particle size distribution. Crystallization is carried out at a temperature of <= 50 DEG C or in a temperature interval of from 50 DEG C to 5 DEG C and observing a cooling rate of < 15 K/h

IPC 1-7

C07C 51/43; **C07C 59/105**

IPC 8 full level

B01D 9/02 (2006.01); **C07C 51/43** (2006.01); **C07C 59/01** (2006.01); **C07C 59/10** (2006.01)

CPC (source: EP KR US)

C07C 51/43 (2013.01 - EP KR US)

C-Set (source: EP US)

C07C 51/43 + **C07C 59/105**

Citation (search report)

See references of WO 0190041A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0190041 A1 20011129; CN 1430594 A 20030716; DE 10026139 A1 20011129; EP 1284953 A1 20030226; JP 2004501107 A 20040115; KR 20030005395 A 20030117; US 2003166968 A1 20030904

DOCDB simple family (application)

EP 0105819 W 20010521; CN 01810040 A 20010521; DE 10026139 A 20000526; EP 01949354 A 20010521; JP 2001586232 A 20010521; KR 20027015938 A 20021125; US 29604502 A 20021121