Figure 1
Use of intra-granuar, extra granular sorbitol or no sobitol as binder.
Investigation of tablet hardess as a function of compression pressure.

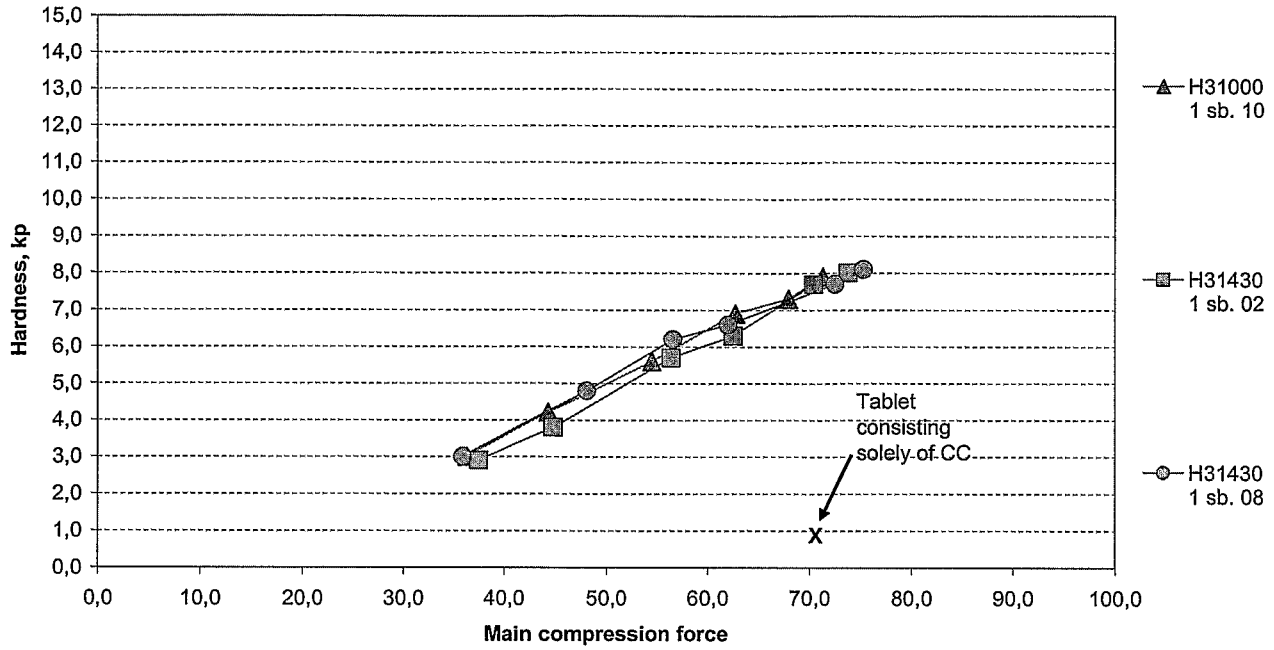


Figure 2
Impact of compaction force on particle size distribution.

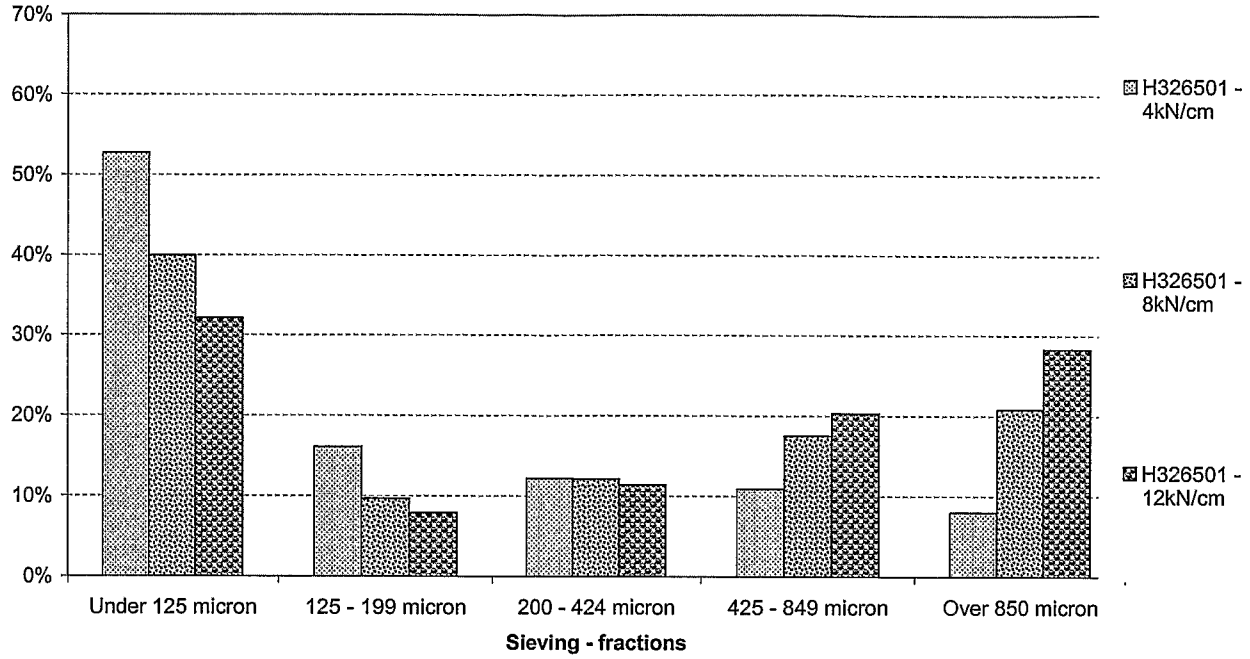


Figure 3.
Impact on tablet hardness of variations in particle size distriburtion of granulate.

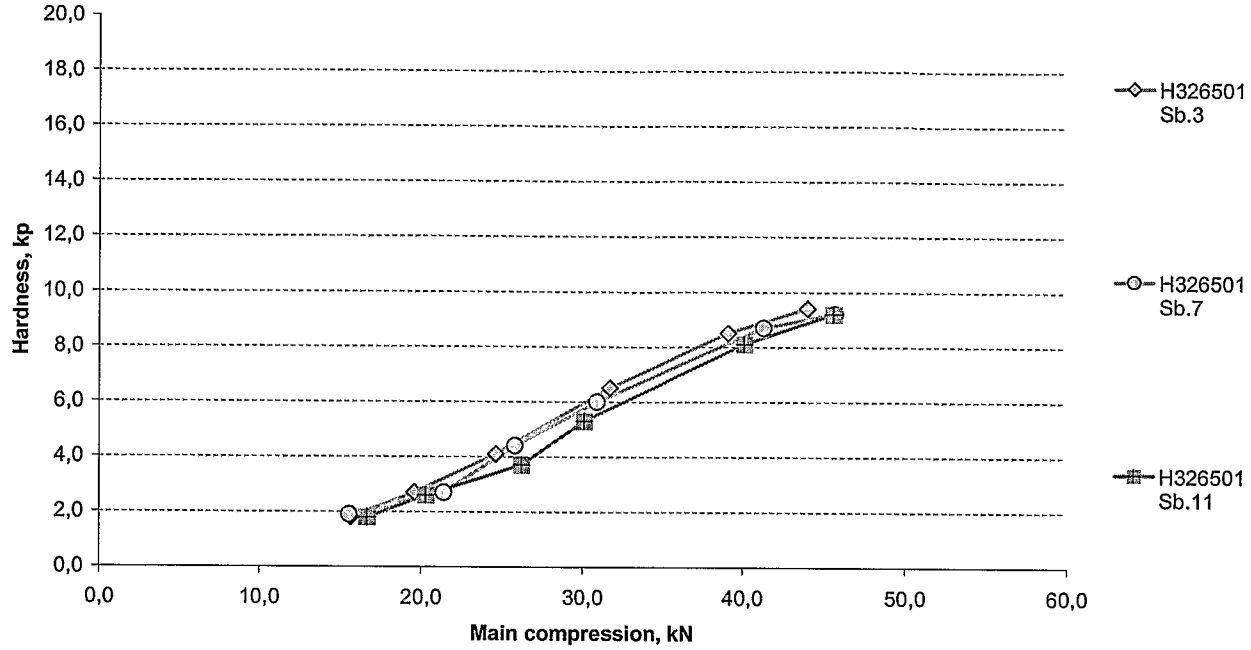


Figure 4
Variation in particle size of sorbitol
Investigation of tablet hardness as a function of compression pressure

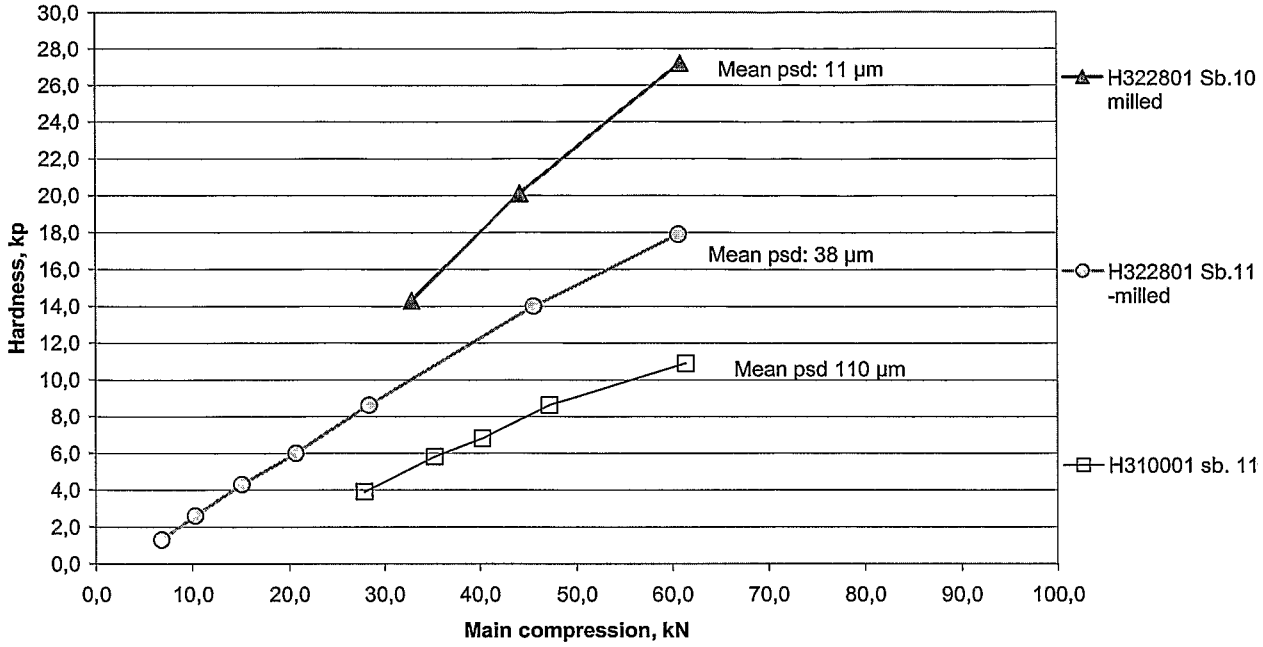


Figure 5.
Variation in amount of sorbitol and addition of mcc
Investigation of tablet hardness as a function of compression pressure.

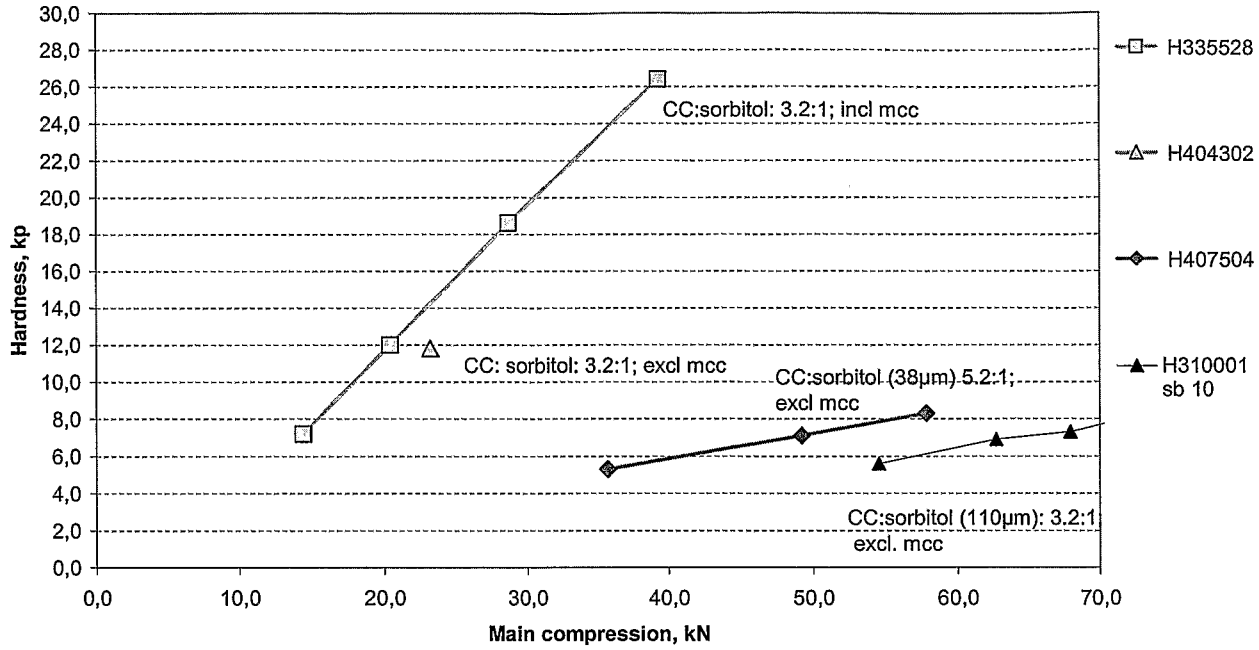


Figure 6
Impact of moisture content of surrounding air on tablet hardness.

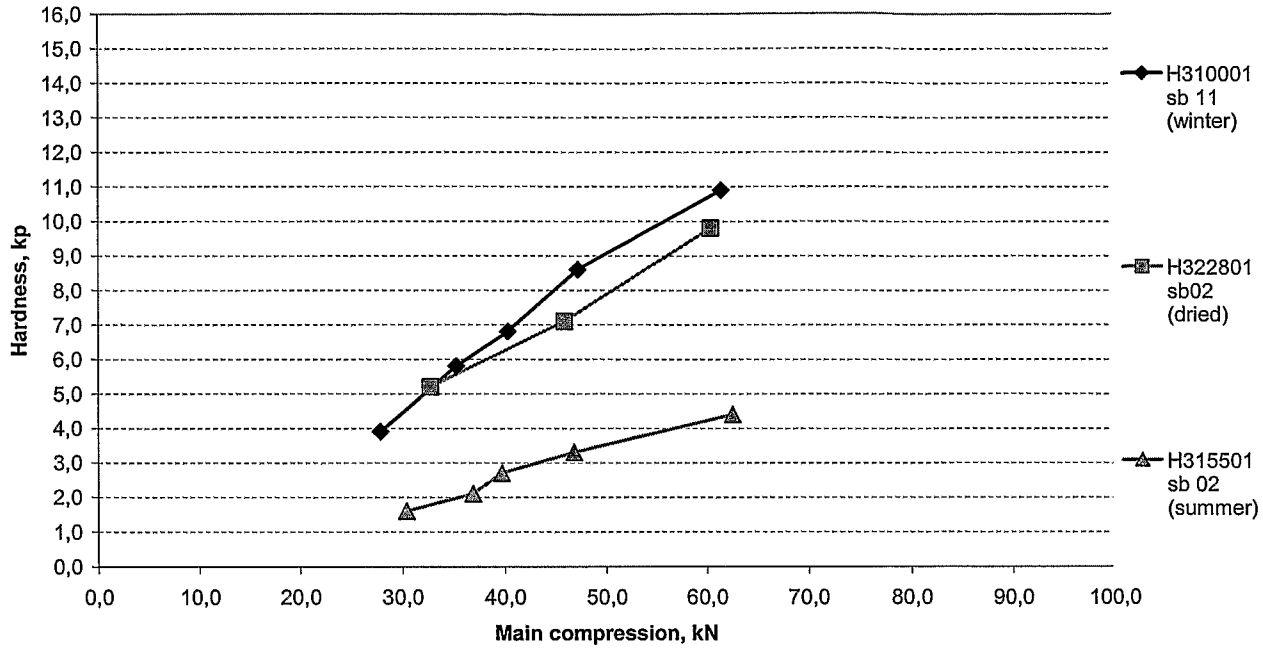


Figure 7
Impact on tablet hardness of variations in form of Calcium crystals

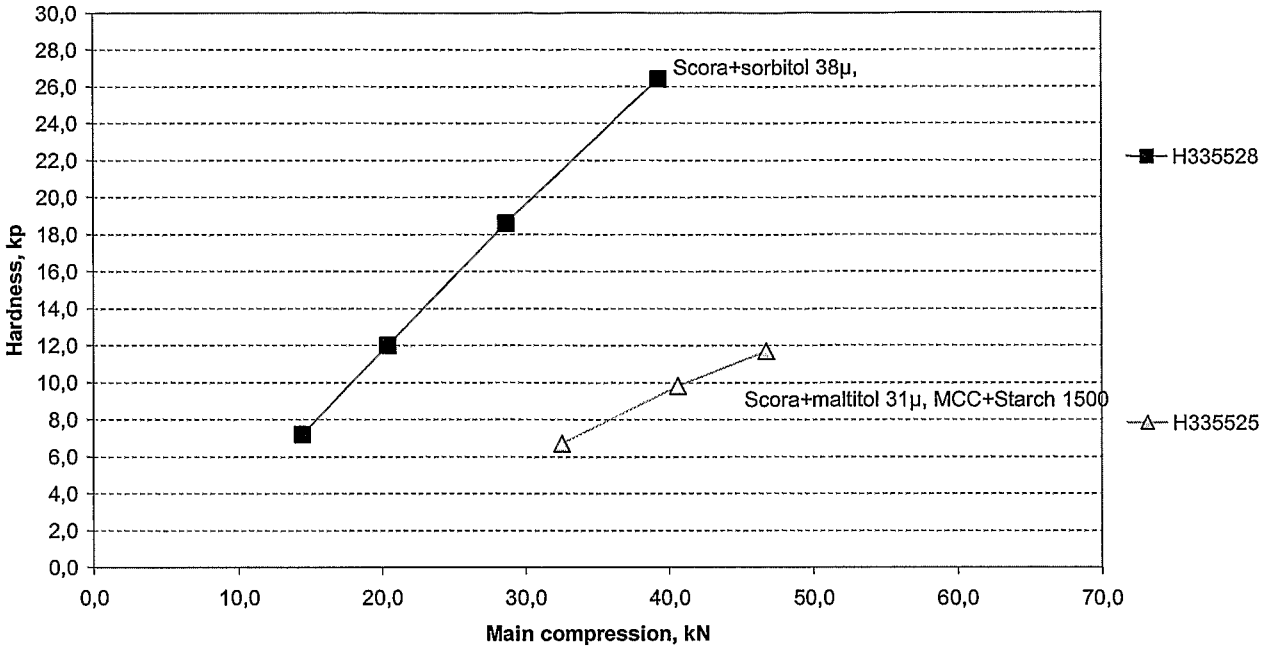


Figure 8
Impact on tablet hardness of omitting lumb breaking of 38µm sorbitol.

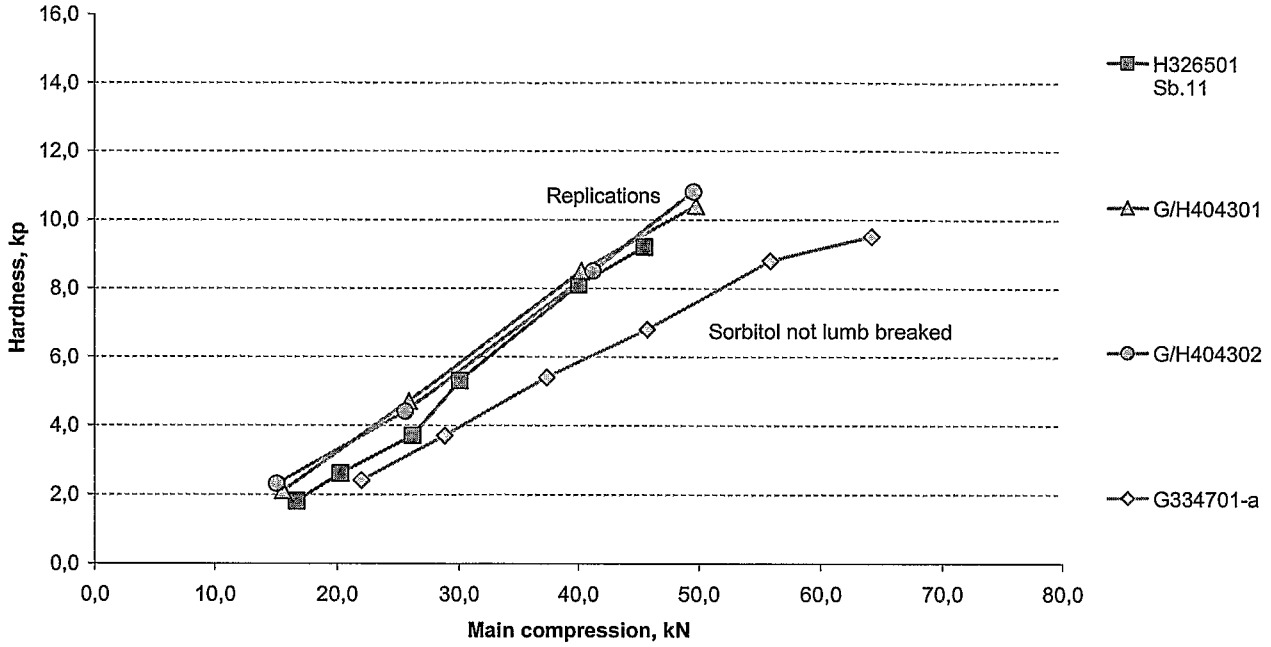


Figure 9
Variation in granulate psd
Investigations of impact on Vitamin D3 assay in samples drawn during tabletting

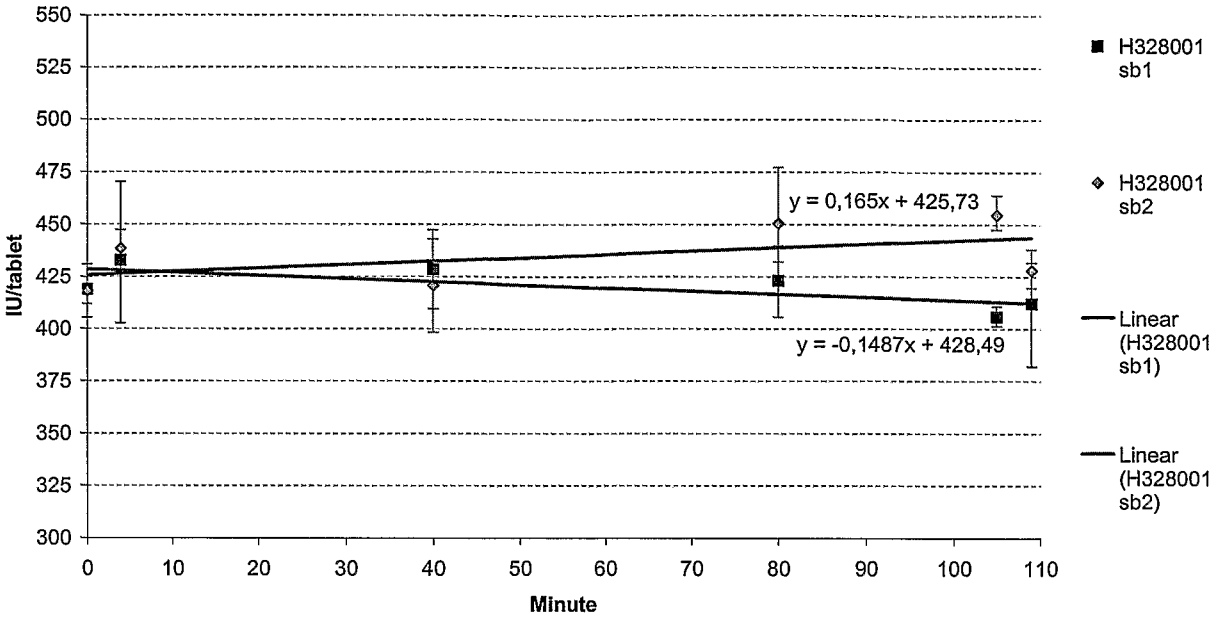


Figure 10
Impact on tablet hardness of admixing of PVP30

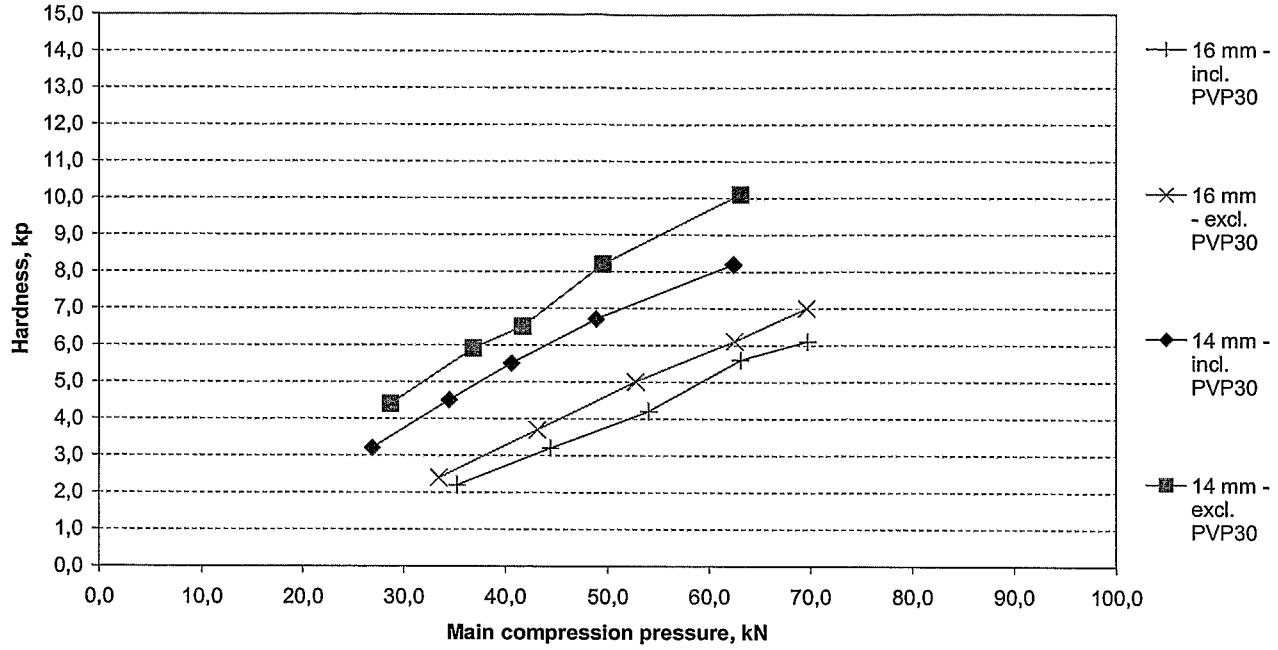


Figure 11
Calcium source: Scoralite - Impact of type and particle size of sugar alcohol

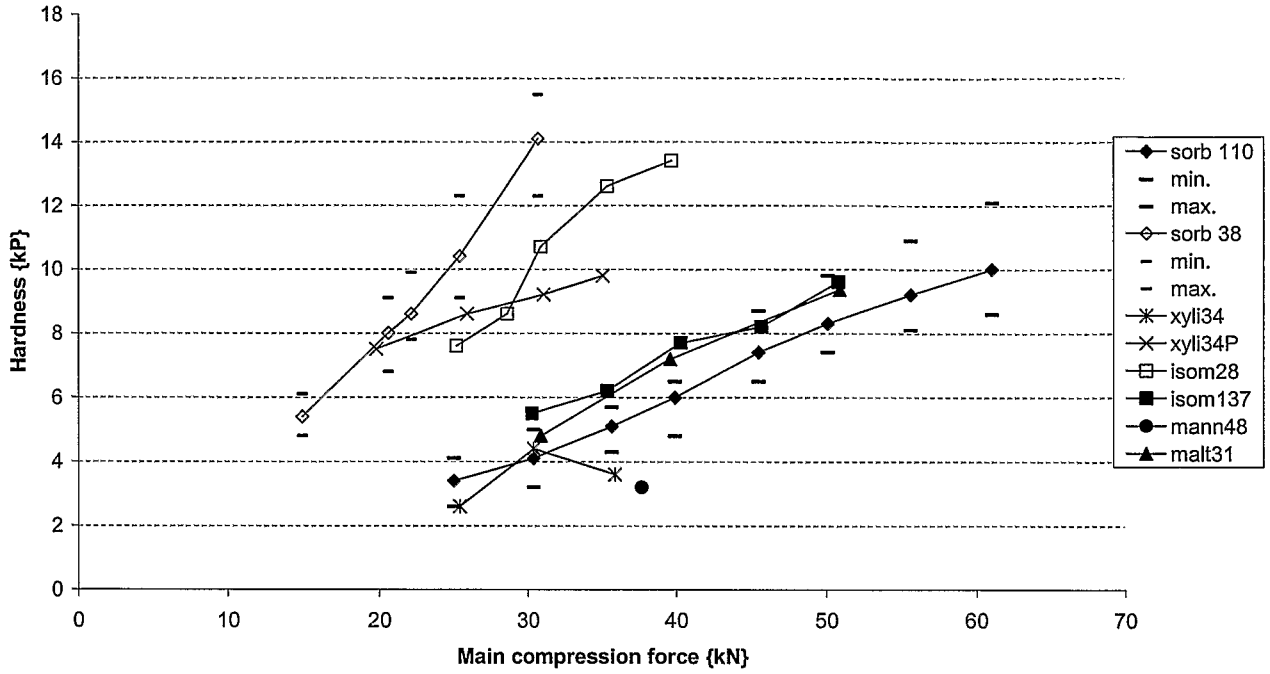


Figure 12
Calcium source: Merck 2064 - Impact of type and particle size of sugar alcohol
Reference: Scoralite

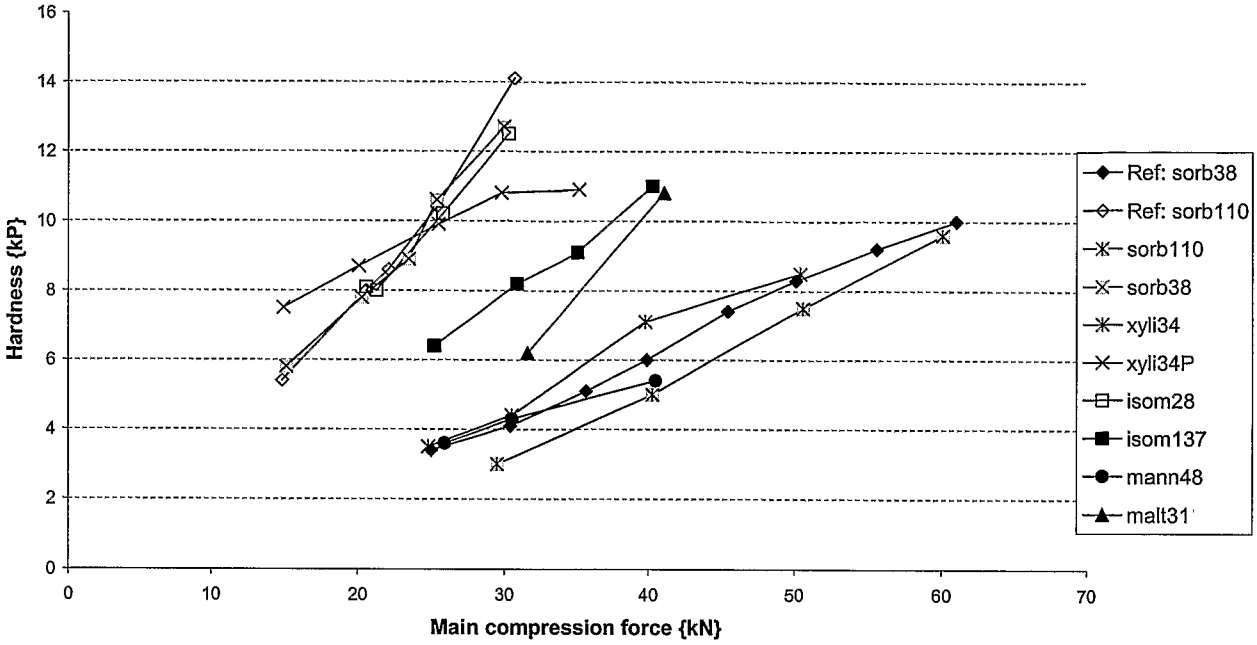


Figure 13
Calcium source: Scoralite - Impact of extra granular admixture of sugar sorbitol of different particle size. Reference: intragranular addition of sorbitol.

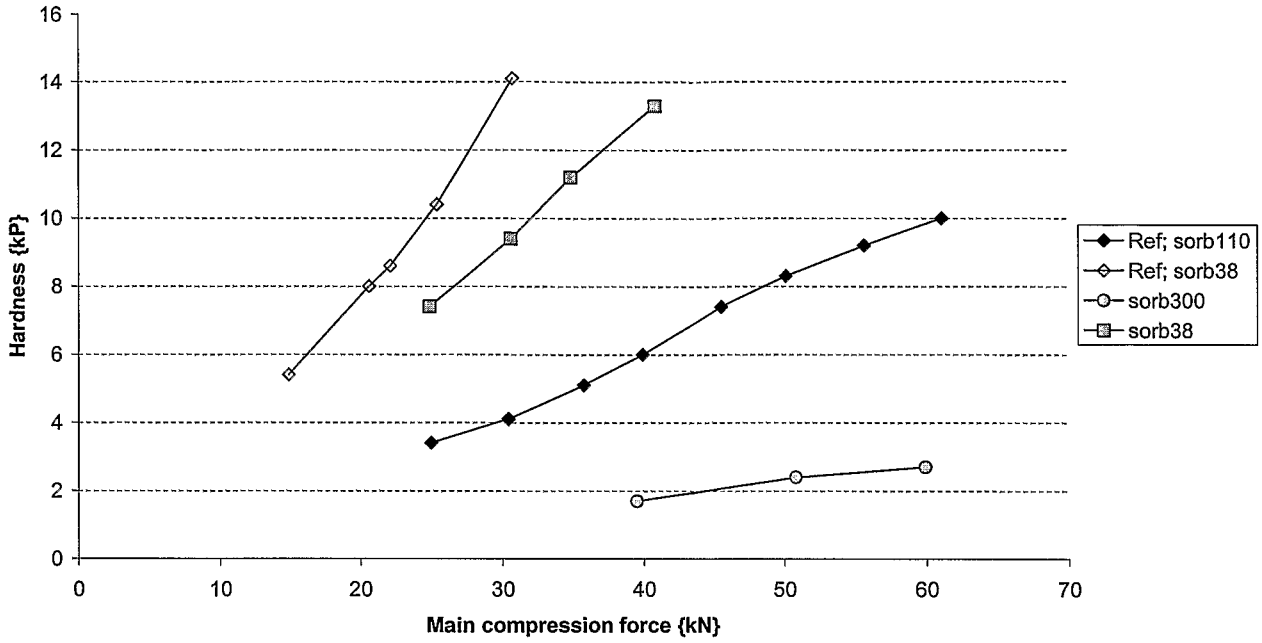
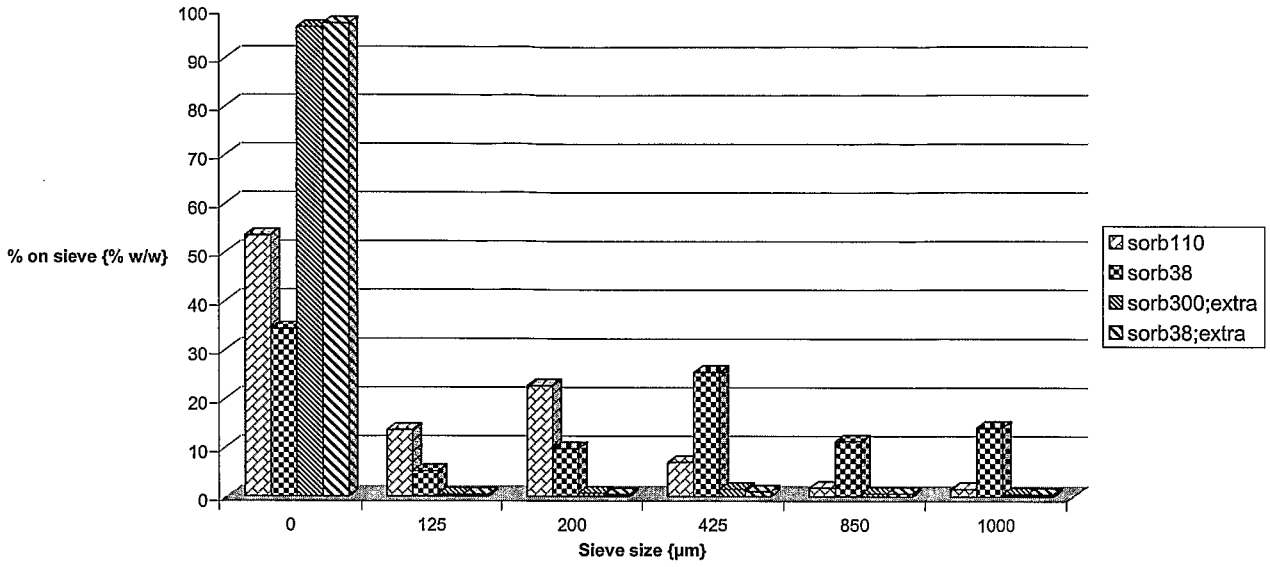
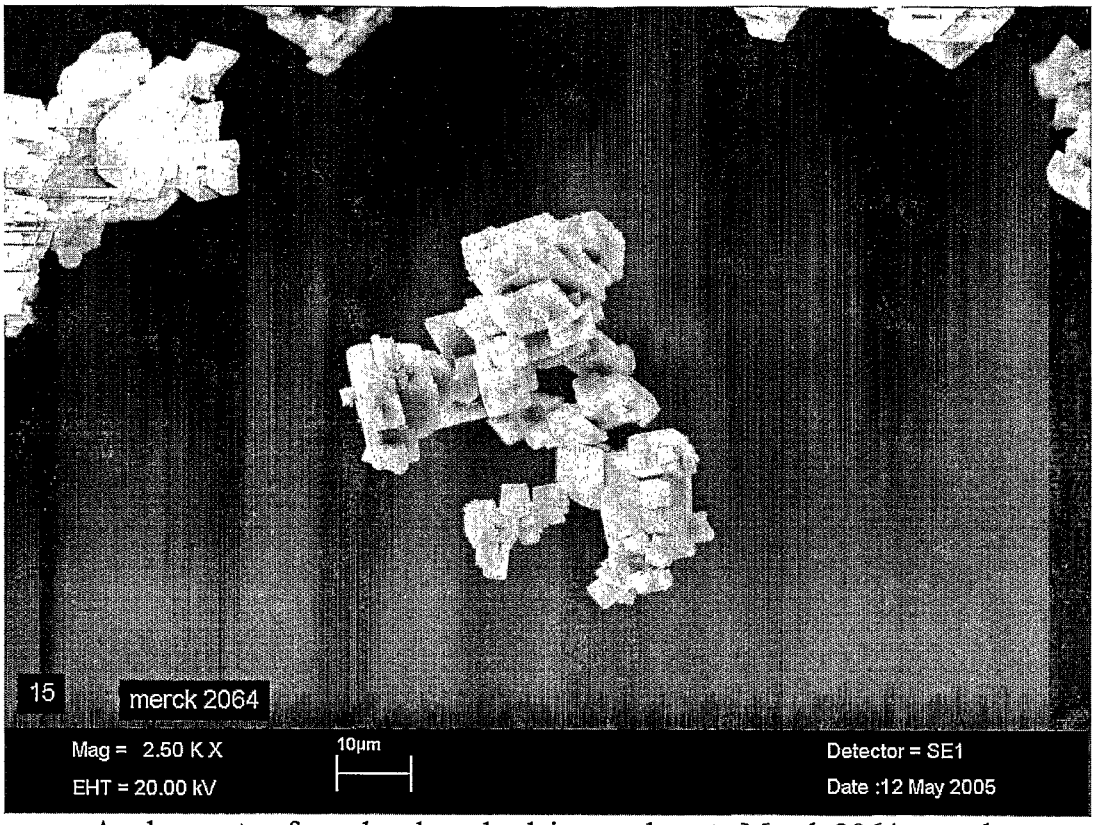
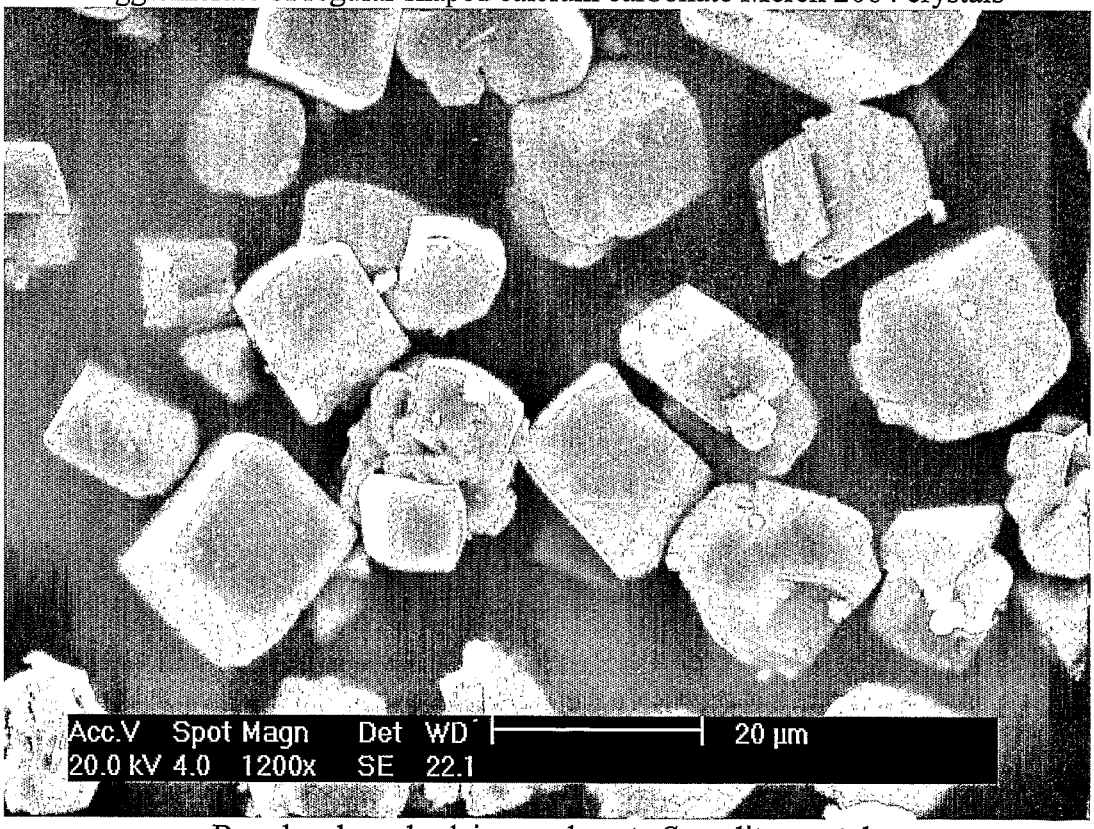


Figure 14
Impact on granular particle size of intra or extra granular admixture of sorbitol.
Calcium source: Scorelite

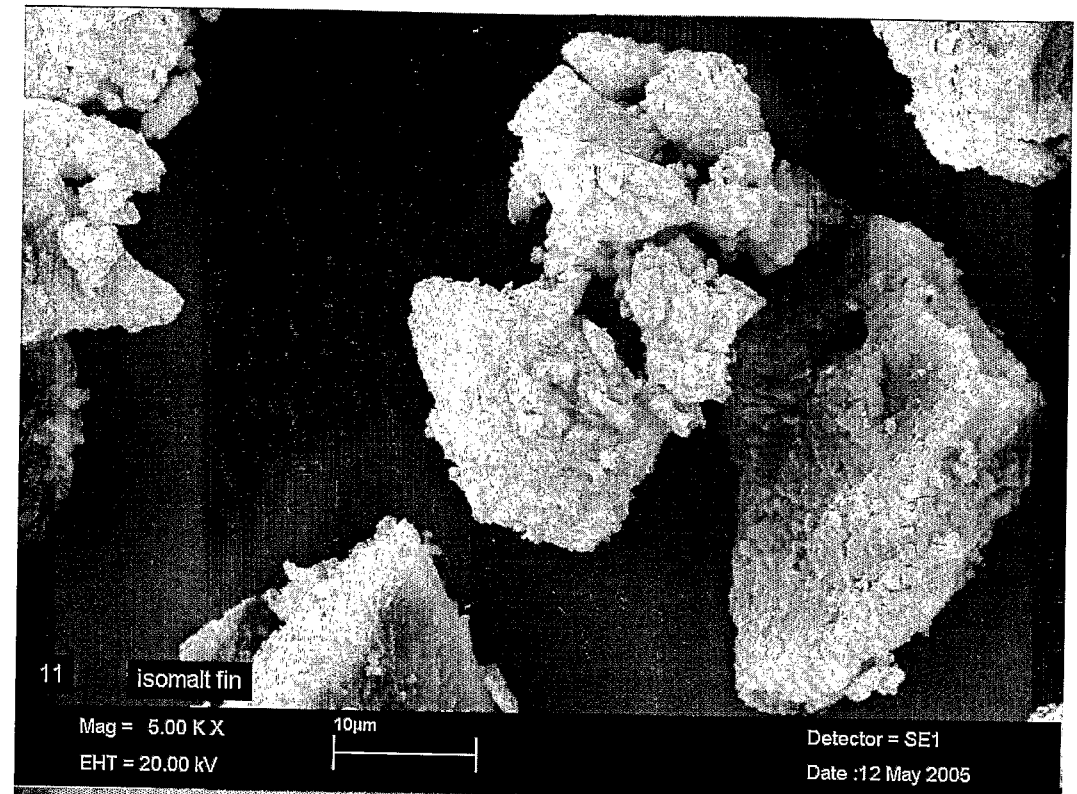


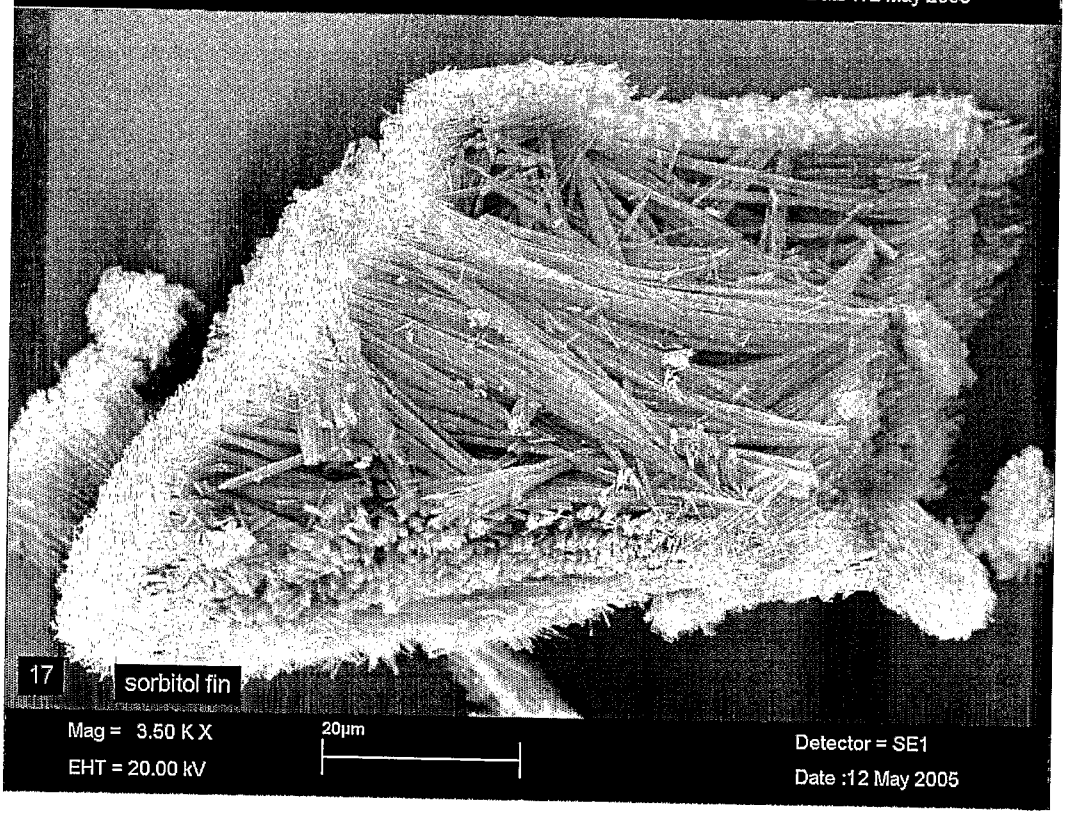


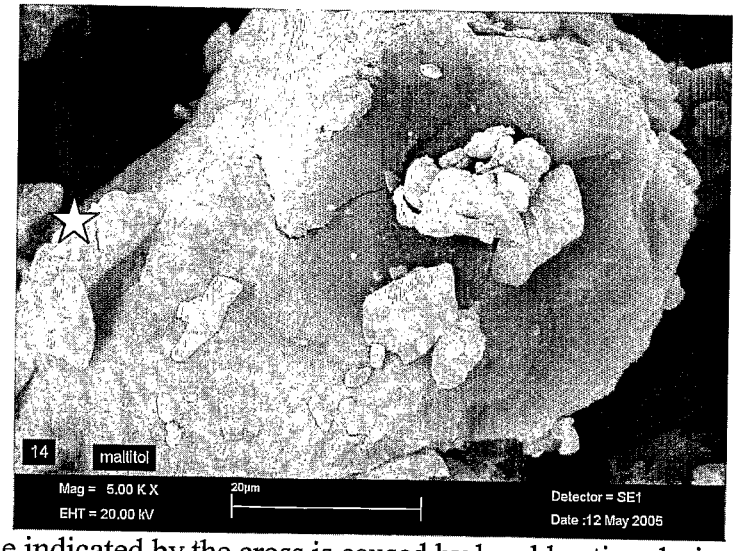
Agglomerate of regular shaped calcium carbonate Merck 2064 crystals



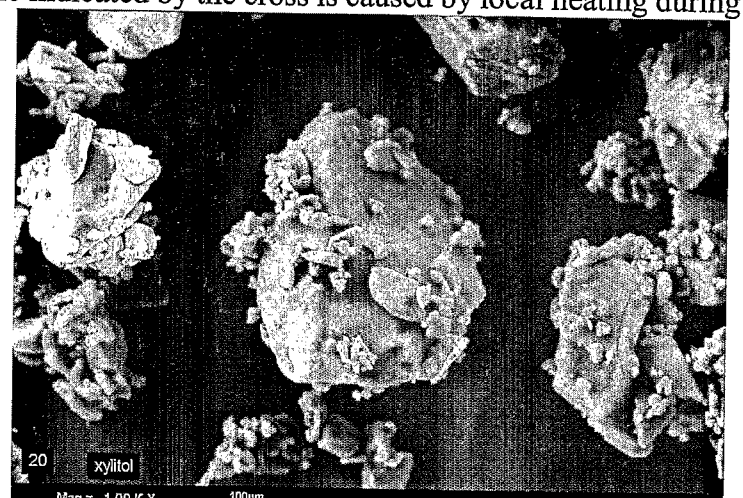
Regular shaped calcium carbonate Scoralite crystals

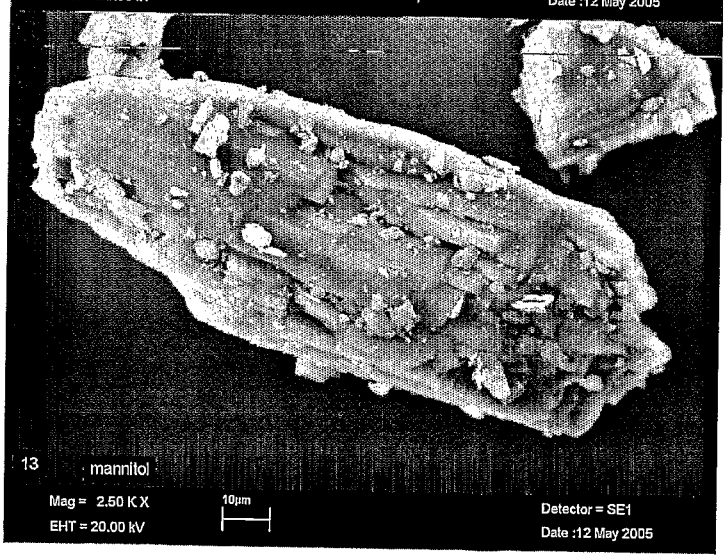

11
isomalt fin
Mag = 5.00 K X
EHT = 20.00 kV
10µm
Detector = SE1
Date :12 May 2005

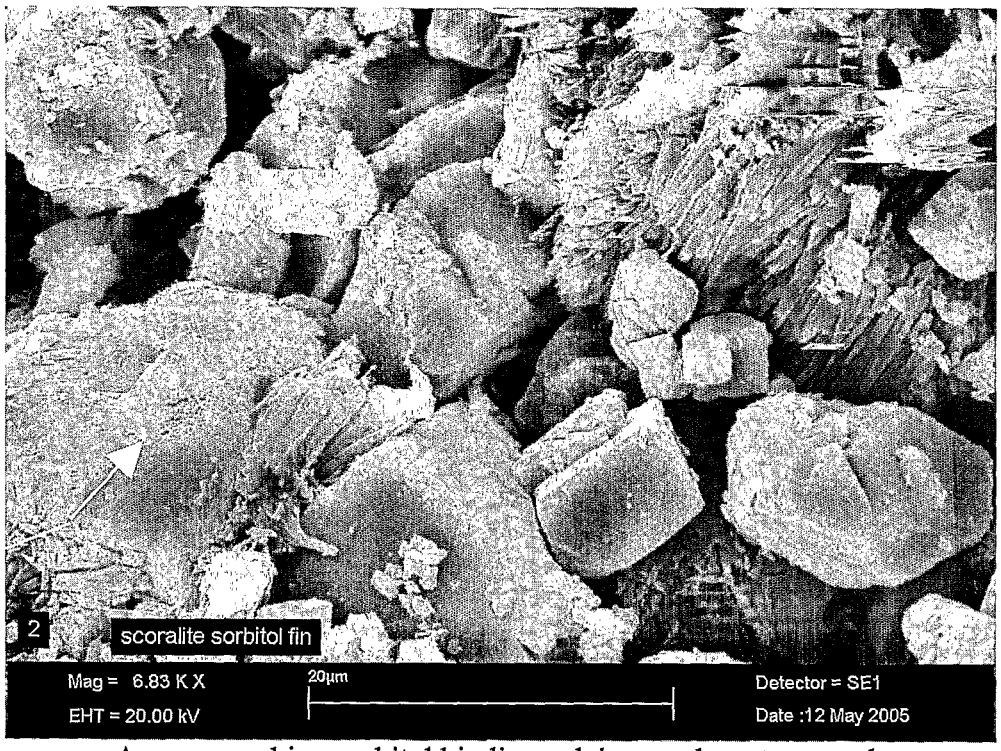

17
sorbitol fin
Mag = 3.50 K X
EHT = 20.00 kV
20µm
Detector = SE1
Date :12 May 2005



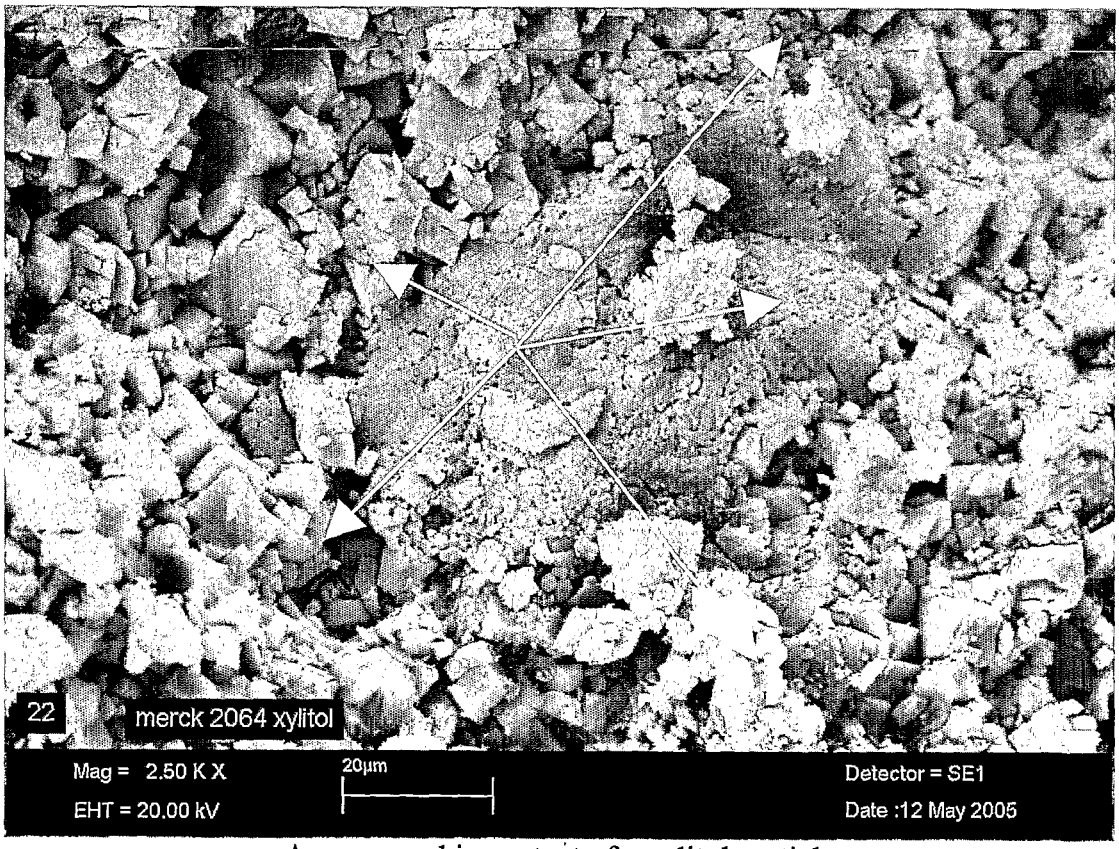
The breakline indicated by the cross is caused by local heating during microscopy.



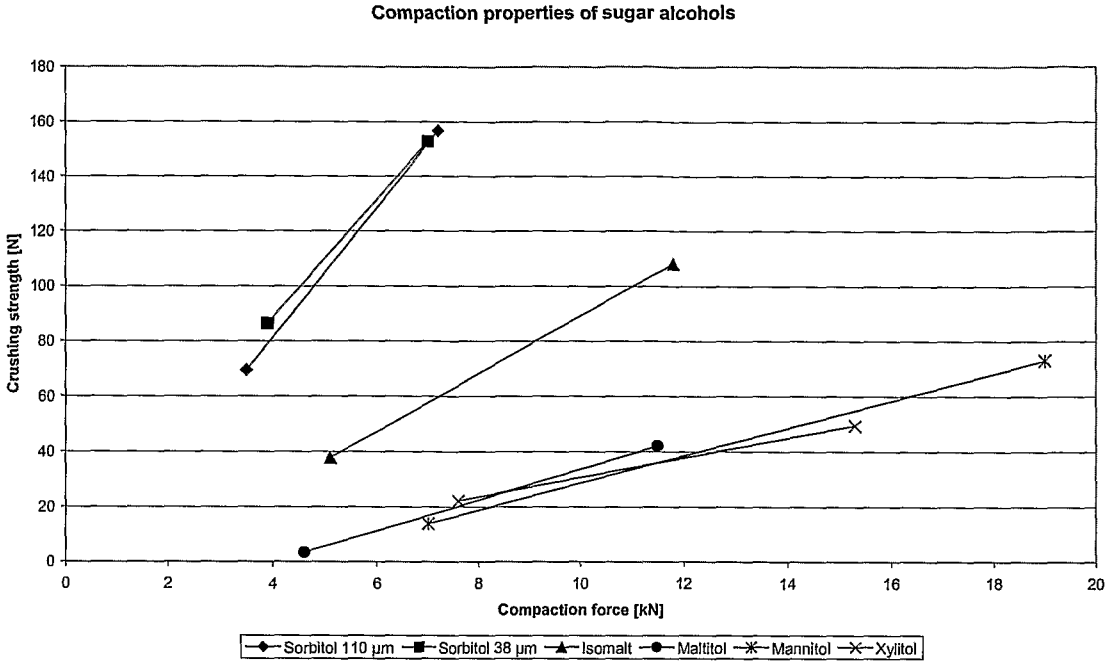


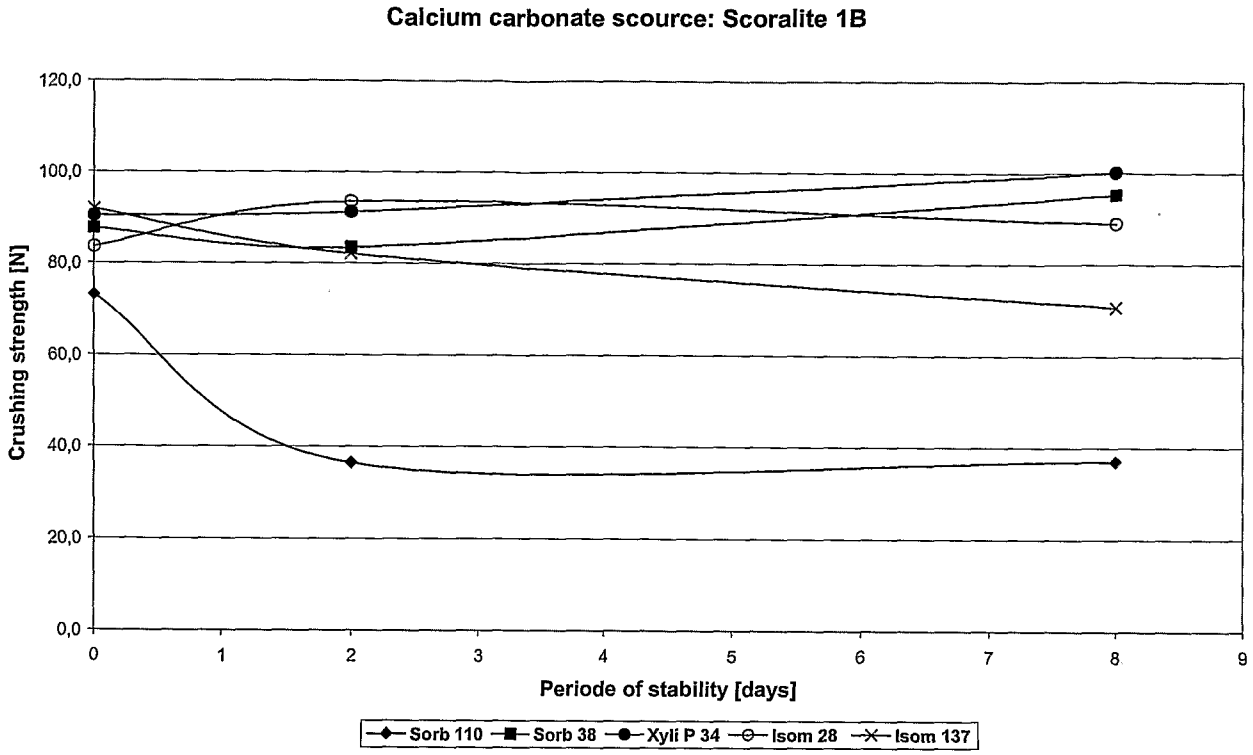


Arrows marking sorbitol binding calcium carbonate crystals



Arrows marking extent of a xylitol particle


Compaction properties of sugar alcohols
Crushing strength [N]
180
160
140
120
100
80
60
40
20
0
0
2
4
6
8
10
12
14
16
18
20
Compaction force [kN]
Sorbitol 110 µm
Sorbitol 38 µm
Isomalt
Maltitol
Mannitol
Xylitol


Calcium carbonate scource: Scoralite 1B
Crushing strength [N]
120,0
100,0
80,0
60,0
40,0
20,0
0,0
0
1
2
3
4
5
6
7
8
9
Periode of stability [days]
Sorb 110
Sorb 38
Xyli P 34
Isom 28
Isom 137

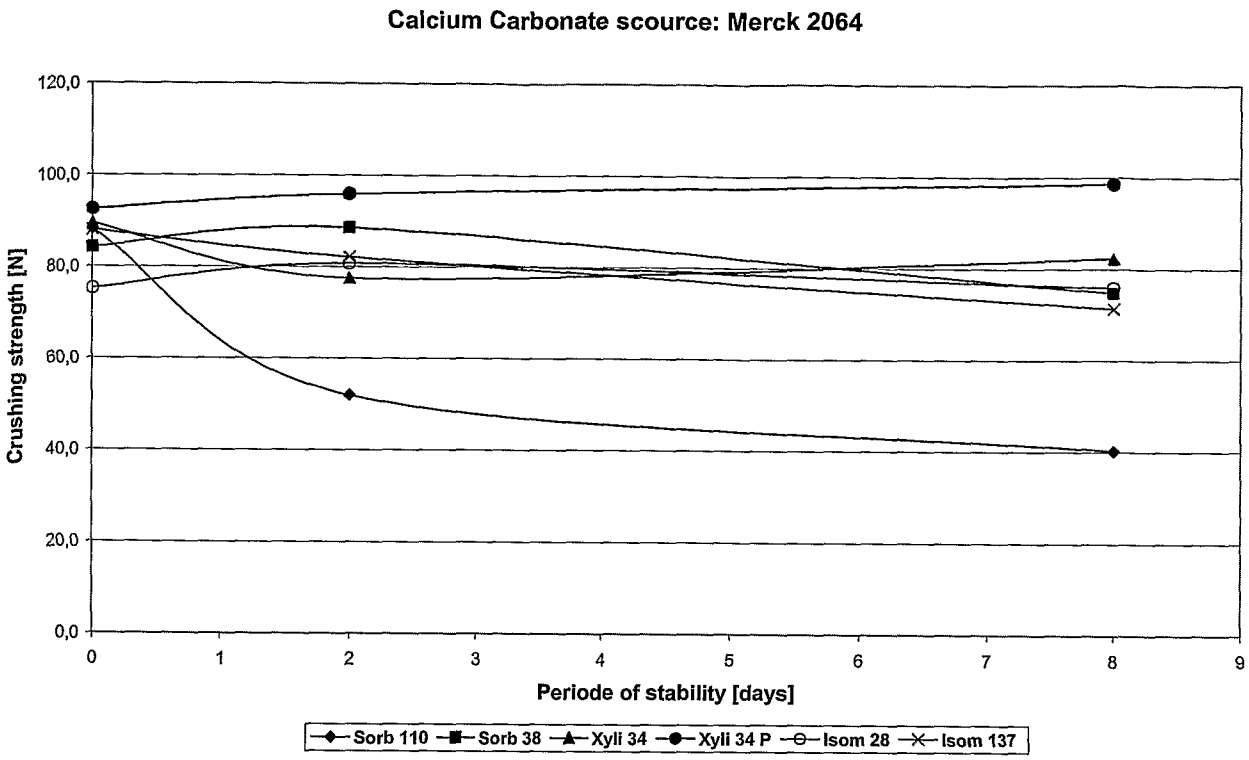
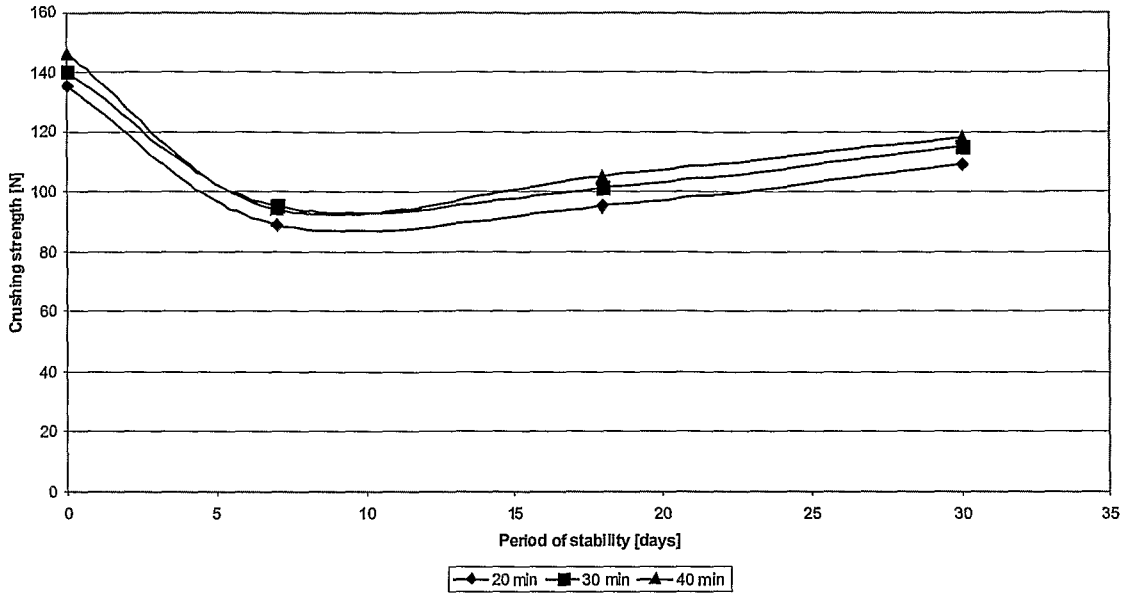
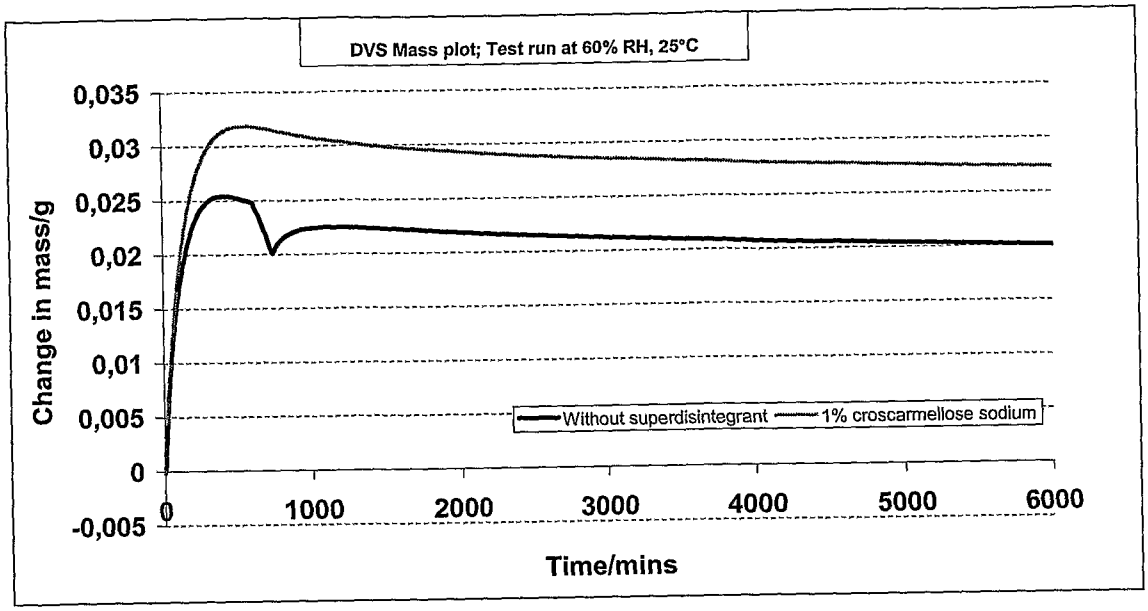
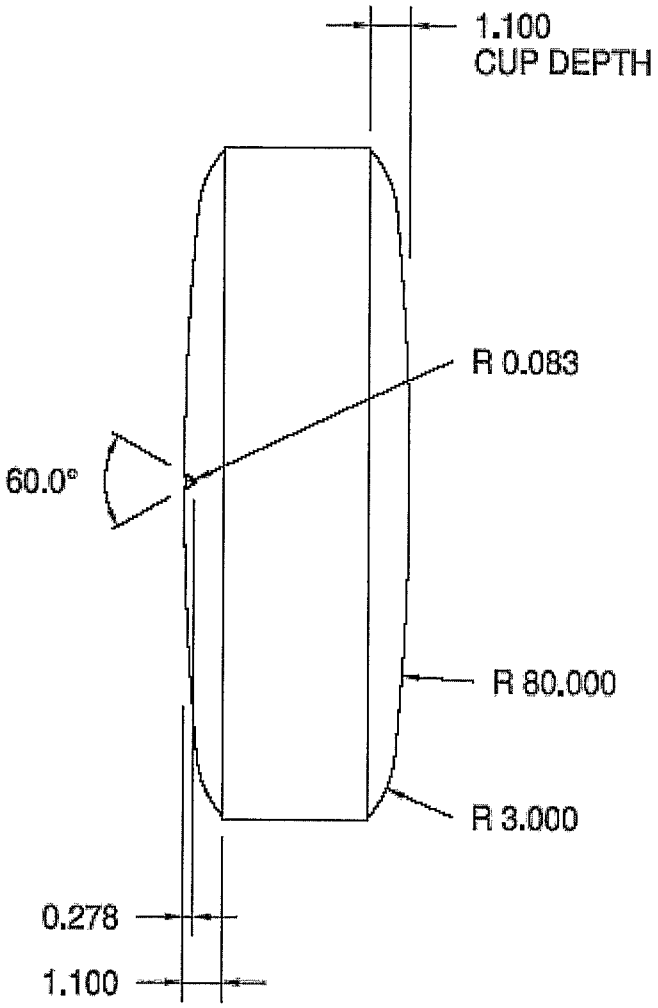

Calcium Carbonate scource: Merck 2064
120,0
100,0
80,0
60,0
40,0
20,0
0,0
Crushing strength [N]
0
1
2
3
4
5
6
7
8
9
Periode of stability [days]
Sorb 110
Sorb 38
Xyli 34
Xyli 34 P
Isom 28
Isom 137

Figure 22
Impact of mixing time on crushing strength stability at 25°C/60%RH




DVS Mass plot; Test run at 60% RH, 25°C
Change in mass/g
0,035
0,03
0,025
0,02
0,015
0,01
0,005
0
-0,005
0
1000
2000
3000
4000
5000
6000
Time/mins
Without superdisintegrant
1% croscarmellose sodium


1.100
CUP DEPTH
R 0.083
60.0°
R 80.000
R 3.000
0.278
1.100

