100
95
90
85
80
75
70
65
60
55
50
Transimission(%)
OH group
(a)
4000
3500
3000
2500
2000
1500
1000
500
Wavelength (cm-1)

100
99
98
97
96
95
94
93
92
Transmission(%)
(b)
4000
3500
3000
2500
2000
1500
1000
500
Wavelength(cm-1)

120
100
80
60
40
20
0
Transmission(%)
4000
3500
3000
2500
2000
1500
1000
500
Wavelength(cm-1)
(c)

100
90
80
70
60
50
40
Transmission(%)
4000
3500
3000
2500
2000
1500
1000
500
Wavelength(cm-1)
(d)

100
90
80
70
60
50
40
Transmission(%)
OH group
(e)
4000
3500
3000
2500
2000
1500
1000
500
Wavelength(cm-1)