

Appendix E

EXPERIMENTAL DATA

1. Repeatability Tests for MA Measurements

This is to lay the basis of characterizing the measured data to make sure if the differences, if any, are significant (in a mathematical sense) or not.

Through repeated measurements under otherwise identical conditions and data processing, we can make sure that our obtained data reflect only the differences caused by the samples, and this is the purpose for us to do the measurements. So we need to carefully control the test conditions to be very stable and repeatable. The meaning of repeatability tests is to make sure that the sample pretreatment, the fluctuations of test conditions (parameters control like temperature, catalyst loading, reaction time, feed weight, reaction pressure) and the operator's skill are qualified for the testing. The results for repeatability tests are listed in Table E-5.

Table E-1 Repeatability tests of MA measurements

Batch no.	MA(%)
1	58.892
2	57.946
3	56.323
4	60.248
5	59.012
6	59.813
7	61.075
8	60.732
9	58.606
10	58.240
11	59.395
12	57.953
X	58.987
SD	1.374

