

# DETERMINATION OF TABLET INTEGRITY

Method WHO/M/27  
Approved 10 December 1999

## 1. Outline of method

The integrity of the tablet formulation is assessed by rotating a predetermined number of tablets in a tablet friability tester.

## 2. Apparatus

*Balance*

*Tablet friability tester* (i.e. Erweka TA-10 or equivalent) equipped with a specific rotating disk

## 3. Procedure

Weight the tablets (see Note 1 below). Introduce the tablets into the rotating disk. Replace the cover, then fix the rotating disk to the tester.

Set the rotation speed and the duration of the test. Start the rotation. At the end of the rotation, report any broken tablets; collect and weigh the tablets (see Note 2 below).

## 4. Calculation

Tablet integrity is determined by calculating the degree of attrition to the formula.

$$\text{Degree of attrition (\%)} = \frac{(M1 - M2)}{M1} \cdot 100 \%$$

Where :

M1 = weight of the tablets before the rotation

M2 = weight of the tablets after the rotation

Report the degree of attrition to the nearest 0.1% and specify the following conditions:

- Specification of rotating disk
- Rotation speed
- Duration of test

*Note 1.* Weigh 10 tablets if the weigh of a single tablet is  $\leq 5$  g.

Weigh 2 tablets if the weigh of a single tablet is  $> 5$  g.

*Note 2.* The test is declared failed if broken tablets are collected after completion of the rotation.