

DATA BULLETIN

CHNS analysis on pharmaceutical samples with the vario MICRO cube

In the pharmaceutical industry, elemental analysis, amongst other methods, is used for purposes of quality control of chemicals. In this field, an accurate analysis is of highest importance.

Laboratories in the pharmaceutical industry more and more follow the GLP guidelines. These ask special features of the analyzer and its software (e.g. 21 CFR part 11). The vario MICRO cube fulfills all these specifications.

Different samples were carefully weighed into tin boats and analyzed with a standard method. Liquid samples were weighed into tin capsules, flushed with helium or oxygen and sealed with a capsule press.

| SAMPLE | | C [%] | H [%] | N [%] | S [%] |
|--------------|---------|-------|-------|-------|-------|
| glucose | theory | 36.33 | 7.06 | | |
| | mean | 36.43 | 7.16 | - | - |
| | abs. SD | 0.04 | 0.01 | | |
| L - cysteine | theory | 29.71 | 5.82 | 11.55 | 26.46 |
| | mean | 29.78 | 5.79 | 11.57 | 26.49 |
| | abs. SD | 0.04 | 0.01 | 0.05 | 0.07 |
| urea | theory | 20.00 | 6.71 | 46.65 | |
| | mean | 19.97 | 6.58 | 46.53 | - |
| | abs. SD | 0.05 | 0.02 | 0.10 | |

The results show that pharmaceutical samples can be analyzed with the vario MICRO cube with highest precision and accuracy.

Samples can be efficiently analyzed. Only one sample has to be weighed to analyze samples with strong variations in its element content.

INSTRUMENT:

vario MICRO cube

DETAILS:

mode: CHNS

sample: 1 – 2 mg pure chemicals



Elementar Analysensysteme GmbH

Elementar-Straße 1

63505 Langenselbold (Germany)

phone: +49 (0) 6184 9393-0

info@elementar.de | www.elementar.de

