

# DATA BULLETIN



## Robust analysis of fluorinated samples with UNICUBE®

Elemental analysis of fluorinated samples is a challenge for the equipment in use. Through the use of fluorine-resistant materials in the gas separation column, the UNICUBE® is especially robust against high loads of fluorine and delivers highest accuracy also for the most demanding sample matrices.

The fluorinated samples were weighed into silver boats and analyzed with a standard method. Directly afterwards, unfluorinated samples were measured again. Please note that some substances were not available in >97 % purity.

SAMPLE	C [%]	H [%]	N [%]	S [%]
fipronil ≥99%	32.93 ± 0.23	1.28 ± 0.07	12.93 ± 0.04	7.19 ± 0.12
N-fluorbenzenesulfonimide ≥97%	45.64 ± 0.41	3.28 ± 0.01	4.39 ± 0.03	20.29 ± 0.19
3-fluoroacetanilide ≥98 %	62.91 ± 0.10	4.64 ± 0.07	9.10 ± 0.03	-
poly(chlorotrifluoroethylene) ≥98 %	20.72 ± 0.16	-	0.14 ± 0.02	-

The data demonstrate unique capabilities of UNICUBE in coping with high loads of fluorine. Neither the accuracy of the data, nor the integrity of the system is affected. In addition, subsequently measured unfluorinated samples are not influenced. No changes in measurement performance can be seen.

UNICUBE guarantees robust and reliable performance even under challenging measurement conditions based on its fluorine-resistant gas separation technology (patented Temperature Programmed Desorption, TPD®). This combines with straightforward and functional instrument design and easy operation to offer the most modern elemental analyzer solution.

### INSTRUMENT:

UNICUBE®

### DETAILS:

mode: CHNS

sample: 2-4 mg pure chemicals



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