



## Total (S) in Soils Analysis

Instrument is configured for Sulphur analysis. Soils samples are weighed in tin caps 5 x 9 mm with  $V_2O_5$  (5÷8mg) added as cleaving agent to extract (S) in full. The sealed sample is then put in the Sampler carousel.

Soils samples include more than 90% of inorganic mineral residue that remains in the quartz liner located on top of the combustion Reactor. Those residues build up until coaxial quartz liner needs removal: the operation is simply performed unscrewing the upper part of the holder to extract the quartz liner, replacing it with a new one without removing the Reactor from Furnace.

To provide the higher number of analyses per day it is recommended to keep sample size between 15 ÷ 40 mg.

Ref. Std. contains S%= 0,039% and 30 mg (30.000 µg) sample size is used.

Absolute amount of Sulphur content in µg is calculated as follows:  
 $30.000 \mu\text{g} \times 0,039\% = 11,7 \mu\text{g}$  absolute amount of Sulphur in the total Sample

This optimal performance obtained at trace level determination confirms EuroVector EA as best choice for the demanding requirements in the soil analysis field.

INSTRUMENTATION	SAMPLE
EA3100 - S analysis time: <7 min.	Solid dried and milled
Calibration Std: Ref. Std S% = 0,039%	Weight: 15 ÷ 40 mg or more

Weaver<sup>NET</sup>, the most advanced software dedicated to EA, performs calibration for S, actuates the autosampler, monitors the baseline allowing the user to see continuously in real time the analysis progress, integrates peaks and presents results in 7 minutes with analysis time fully independent from sample size used.





### (S%) TYPICAL RESULTS

REF STANDARD	S%
Soil std	0.039%
Soil std	0.038%
Soil std	0.039%
Average	0.039
Std. Dev.	0.001

### (S%) TYPICAL RESULTS

SAMPLE	S%
Sample	0.103%
Sample	0.090%
Sample	0.099%
Sample	0.093%
Average	0.096
Std. Dev.	0.006

New samples can be added anytime to the carousel with Weaver<sup>NET</sup> appending samples into the Samples Table. Results are provided in a pre-selected report format.

EuroVector maintains expertise on customer's applications for analytical support: the most representative samples have been grouped as "Samples by Category" providing a series of Application notes for each category.



Biomass,  
Biofuel,  
Wastes



Soils,  
Sediments,  
Rocks



Plants,  
Branches  
leaves,  
Roots,  
Vegetables



Food, Feed  
Oil seeds,  
Sunflowers,  
Cereals,  
Corn,  
Brewing malt...



Coal,  
Coke,  
Peat



Petroleum,  
Lubricants



Organics,  
Synthetic,  
Compounds,  
Polymers  
textiles,  
Pharma,  
Fertilizers