

# sulfimax GX

## H<sub>2</sub>S Headspace Module

### H<sub>2</sub>S determination in solid and pasty samples

#### Product description

The determination of volatile hydrogen sulphide (H<sub>2</sub>S) in solid and pasty samples is now very easy. The selective H<sub>2</sub>S analysis system Sulfimax GX of the ECH is extended with a manual headspace module.

The sample is filled into a glass vial and heated in the headspace module. Depending on the sample type, the heating temperature can be varied from 30 to 180 °C. The volatile H<sub>2</sub>S is transported through the gas circulation to the sensor in the Sulfimax GX and measured there. Very low H<sub>2</sub>S concentrations are detectable. Sample preparation is not necessary.

Due to the short determination times, high sample throughputs are possible. The compact and robust device can be easily operated by anyone.

#### Applications

H<sub>2</sub>S analysis systems from ECH, coupled with the Headspace Module allow the measurement of:

- solid samples, e. g. elementary sulphur, sludge, bitumen,
- liquid samples such as wastewater with sludge particles,
- pasty samples,
- soil samples and waste



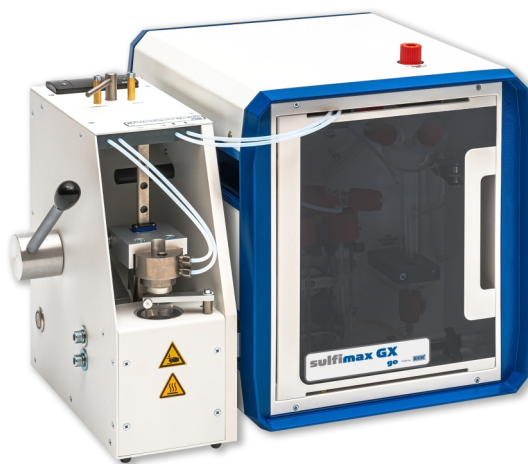
Analysis of solid and pasty samples containing H<sub>2</sub>S

#### Advantages

- Easy connection to the Sulfimax GX Lab and Go
- No sample preparation necessary for solid samples
- Very low H<sub>2</sub>S concentrations detectable
- Manually operated and robust measuring system
- Easy handling for everyone



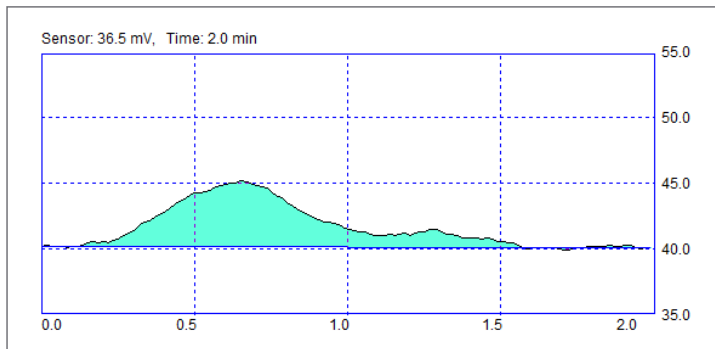
H<sub>2</sub>S Headspace Module for coupling to Sulfimax GX analysis systems of ECH



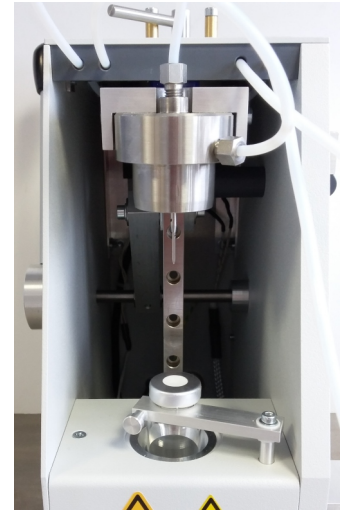
Sulfimax GX Go with connected Headspace Module

## Features and Results

- Measurement of the sample in the sealed 20 ml vial - no contact of the sample with components of the analysis system
- Gas extraction technique for rapid release and separation of H<sub>2</sub>S from the sample
- Temperature control from 30 to 180 °C
- Measuring time from 2 to approx. 15 min, depending on the H<sub>2</sub>S content of the sample
- Double-needle system for gas transfer
- Bypass circuit for continuous gas flow



Determination of volatile H<sub>2</sub>S from bitumen by headspace technique



Sealed sample vial in the Headspace Module

## Technical specifications

Sample type:	solid, pasy and high viscous
Sample volume:	0.01 ... 20 mL (g)
Heating temperature:	30 ... 180 °C
Temperature resolution:	0.1 °C
Heating method:	isothermally
Power supply:	230 V
Power input:	100 W
Dimensions:	130 x 270 x 290 mm (W x H x D)
Weight:	5 kg



Sulfimax GX Lab with coupled H<sub>2</sub>S Headspace Module and autosampler for liquid samples

### ECH Elektrochemie Halle GmbH

Otto-Eißfeldt-Str. 8  
D-06120 Halle (Saale)  
Germany

Tel.: +49 (0) 345 279570-0  
Fax: +49 (0) 345 279570-99

Email: [info@echscientific.com](mailto:info@echscientific.com) • [www.ech.de](http://www.ech.de) • [www.aquamaxkf.com](http://www.aquamaxkf.com)

### ECH Scientific Limited

Building 69, Wrest Park, Silsoe  
Bedfordshire, MK45 4HS  
United Kingdom

Tel.: +44 (0) 1525 404747  
Fax: +44 (0) 1525 404848



**SCIENTIFIC**

part of ECH Elektrochemie Halle  
Global Sales Division

**the ECH advantage**

in-lab | mobile | on-line | process