



ADVANCED SOLUTIONS FOR WATER SECURITY



**SEIBOLD Online-Analyser for Arsenic**

Continuous Analysis. Reliable Results.

## Sources

Arsenic is found in the atmosphere, in water, soils, sediments and organisms due to releasing by various industrial processes, mining or smelting and agricultural activities as well as a byproduct of coal combustion.

**Natural sources.** Arsenic is found in more than 245 minerals. Anthropogenic sources. Main sources of arsenic are copper and lead ores. Industry. Arsenic is used as an additive in special alloys, in microelectronics and semiconductor industry, as a decolorizing agent in the glass and ceramics industries.

**Arsenic in water.** Arsenic is found in groundwater as a result of the strong influence of water-rock interactions. Usual groundwater concentrations range from 0.5 to 10 µg/L.

**Drinking water.** The current WHO provisional level of As in drinking water for the European Union is 10 µg/L, the current level in the United States is 50 µg/L, and the Australian Drinking water Guidelines level is 10 µg/L

## Method

Metal is measured as chelate complex between metal ions in the wastewater and sensitive spectrophotometric reagent dye. The change of the intensity of the visible light throughout cuvette containing formed metal complex is directly proportional to metal concentration.

### System Information

<b>Measurement variable</b>	Arsenic (As)
<b>Measurement application</b>	Drinking water, river monitoring, electroplating and semiconducting industry,
<b>Measurement ranges</b>	1-100µg/L (ppb) other ranges possible upon request
<b>Accuracy and Precision</b>	± 3 % (based on full scale)
<b>Resolution</b>	1µg/L (ppb)
<b>Calibration and cleaning</b>	Automated
<b>Seibold Reagent kit</b>	Buffer, Conditioner and Dye

<b>Measurement Information</b>	
<b>Measurement method</b>	Spectrophotometric (LED, detector)
<b>Measurement interval</b>	Continuous; Discontinuous (programmable, external start)
<b>Sample and Reagents consumption per measurement</b>	Sample: ~ 75 - 200 ml Seibold Buffer and Reagent: ~ 3 ml
<b>Environmental Data</b>	
Ambient operating temperature, sample temperature: 5 to 40°C	
Ambient operating humidity: Up to 95 % RH non-condensing (bellow the condensation limit)	
<b>Electrical Data</b>	
<b>Supply voltage</b>	220 ... 230 V AC, 50...60 Hz (110 V AC or 24 V DC, optional)
<b>Power consumption</b>	~ 50 VA
<b>Output signal</b>	4...20 mA
<b>Screen</b>	Color, TFT, liquid crystal display (LCD) with built-in backlight and brightness adjustment
<b>Maintenance</b>	
Maintenance interval: 3 months	

**Contact us for more information:**



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