



Key Features

- Unique sampler made of porous plastic material (PES)
- Pot, cylinder, and column research
- Minimal disturbance of hydraulic properties of the soil
- Low dead volume < 0.5 millilitres
- Minimal ion exchange capacity (less than soil)

The Rhizon samplers are used for repeated and reliable sampling of all dissolved components in the soil solution. This unique sampler is made of porous plastic material (PES) and has standard 0.15-micron pores.

This set is ideal for studies on undisturbed soil columns and pots with plants, the standard Rhizon soil moisture samplers can be inserted through the wall. During sampling, the pH value of the soil is not affected. The standard set can be extended with various accessories.

Applications

- Environmental research
- The Rhizon soil moisture samplers are very suitable for pot, cylinder and column research
- Plant uptake of soluble nutrients as nitrate
- Solubility of metals in soil
- Transport of soluble components in soil
- Accumulation of salts, etc

Set contains

- Rhizon soil moisture samplers, type MOM, with a length of 10 centimetres (complete with PVC/PE tubing, connectors and protective caps, (10 pieces))
- Set needles with protective caps (10 pieces)
- Set of glass vacuum tubes with a 9 millilitres contents (10 pieces)

Specification	
Sampler diameter	2.5 mm
Sampler length	100 mm
Sampler volume	< 0.5 ml
Pore size sampler	0.15 micron
Sampler material	PES (polyethersulfon)
Material strengthening wire	Stainless steel



The standard set can be extended with various accessories such as:

- Short Rhizon soil moisture samplers (5 centimetres porous material)
- Syringes (to be used instead of vacuum tubes) connectors for connecting the syringes (including spacers for blocking the syringes)
- PE extension tube (black)
- Silicone connecting tubing to connect the extension tubing to the soil moisture samplers
- The Macro Rhizon soil moisture sampler is especially suited for use in the field

Available Rhizon options

Rhizon SMS MOM

For sampling metals, a special Rhizon soil moisture sampler type MOM is available, with a length of 5 cm (192122) and 10 cm (192121) and a diameter of 2.5 mm, with glass fibre reinforced strengthened wire and 10 cm coextruded tubing.

Rhizon SMS CSS

For direct sampling of macro and micro elements with minimal disturbance, a special Rhizon soil moisture sampler type CSS is available, with a length of 5 and 10 cm and a diameter of 2.5 mm, with glass fibre reinforced strengthened wire and 10 cm coextruded tubing

Rhizon SMS FLEX -

For inserting in pots during filling, the Rhizon soil moisture sampler type FLEX with a length of 10 cm, with nylon strengthened wire is available.

Macro Rhizons for field research - (19.21.35)

The MacroRhizons are thicker at 4.5 mm diameter and more robust, with an epoxy core. They can be used very effectively in the field, even down to a depth of several feet. Installation at an angle of around 45° in a drilled and gouged out small-diameter hole guarantees good contact between the soil and the porous element. Moreover, this prevents the rainwater running into the hole. Extension tubes and hoses are available for installation at greater depths.

Method

The sampler is reinforced with wire and dissolved organic and inorganic matter will not be absorbed on the soil moisture sampler. Due to the minimal disturbance the soil will quickly settle, resulting in a good sampler-soil contact.

This sampler type has a length of 9 centimetres and a diameter of 4.5 millimetres. For installation at greater depths, a standard sampler with PVC extension pipe can be used. A sample is obtained by placing the sampler under vacuum, by using a vacuum tube or a syringe.