

Materials List for:

# A Whole Cell Bioreporter Approach to Assess Transport and Bioavailability of Organic Contaminants in Water Unsaturated Systems

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## Materials

Name	Company	Catalog Number	Comments
Confocal Microscope	Leica		TCS SP5X, LAS AF - Version 2.6.1; or equivalent CLSM
GC HP 7890 Series GC and Agilent 5975C MSD	Agilent		an equivalent GC/MS may be used
GC capillary column J&W 121-5522	Agilent		
Cork borer	Fisher Scientific	12863952	or any other
Cover slips	Marienfeld	107222	High performance, No.1.5H
GC/MS insterts	WICOM	WIC 47080	
GC/MS vials 2 ml	WICOM	WIC 41150	
Lids / septa for screw cap vials	DIONEX	49463 / 049464	
Lids for GC/MS vials	WICOM	WIC 43948/B	
Objective Slides	Menzel		ordinary
PDMS coated glass fibers	Polymicro Technologies, Inc.		V (PDMS) = 13.55 ± 0.02 µl m <sup>-1</sup>
Petri Dishes small / big	Greiner	633-102 / 628-102	
Screw cap vials 40 ml	DIONEX	48783	other glass vials may be used
Screw cap vials 60 ml	DIONEX	48784	other glass vials may be used
Acenaphthylene d <sub>08</sub>	Dr. Ehrenstorfer	C 20510100	
Acetone	Carl Roth	9372.2	
Activated carbon	Sigma-Aldrich	242276-1kg	
Agarose	Carl Roth	2267.4	
Fluorene	Fluka	46880	
Kanamycin sulfate	Carl Roth	T832.2	50 mg L <sup>-1</sup>
Methanol	Carl Roth	P7171	
<b>Minimal Medium:</b> 100 ml <b>Solution 1</b> + 25 ml <b>Solution 2</b> + 5 ml <b>Solution 3</b> ad. 1,000 ml aqua dest			
<b>Solution 1</b>			
Ammonium sulfate	Carl Roth	3746.1	5 g L <sup>-1</sup>
Magnesium chloride x 6 H <sub>2</sub> O	Carl Roth	2189.1	1 g L <sup>-1</sup>
Calcium nitrate x 4 H <sub>2</sub> O	Carl Roth	P740.1	0.5 g L <sup>-1</sup>
<b>Solution 2</b>			
Disodium phosphate	Carl Roth	P030.1	55.83 g L <sup>-1</sup>
Monopotassium phosphate	Carl Roth	3904.1	20 g L <sup>-1</sup>
<b>Solution 3</b> (pH 6.0)			

Disodium EDTA	MERCK	1084180250	0.8 g L <sup>-1</sup>
Iron(II) chloride x 4 H <sub>2</sub> O	MERCK	1038610250	0.3 g L <sup>-1</sup>
Cobalt(II) chloride x 6 H <sub>2</sub> O	Carl Roth	T889.3	4 mg L <sup>-1</sup>
Manganese(II) chloride x 1 H <sub>2</sub> O	Carl Roth	4320.2	10 mg L <sup>-1</sup>
Copper(II) sulfate	Carl Roth	P023.1	1 mg L <sup>-1</sup>
Sodium molybdate x 2 H <sub>2</sub> O	Carl Roth	0274.1	3 mg L <sup>-1</sup>
Zinc chloride	MERCK	1088160250	2 mg L <sup>-1</sup>
Lithium chloride	Carl Roth	P007.1	0.5 mg L <sup>-1</sup>
Tin(II) chloride x 2 H <sub>2</sub> O	Carl Roth	4473.1	0.5 mg L <sup>-1</sup>
Boric acid	Riedel-de-Haen	11606	1 mg L <sup>-1</sup>
Potassium bromide	Carl Roth	A137.1	2 mg L <sup>-1</sup>
Potassium iodide	Carl Roth	6750.1	2 mg L <sup>-1</sup>
Barium chloride	Carl Roth	4453.1	0.5 mg L <sup>-1</sup>
MMA			Minimal medium + agarose 0.2%
Phenanthrene d <sub>10</sub>	Dr. Ehrenstorfer	C 20920100	
<b>Potato Dextrose Agar:</b> 24 g L <sup>-1</sup> broth + bacto-agar 1.5%; pH 6.8			
Potato Dextrose broth	Difco/ Beckton Dickinson	254920	
Bacto-agar	Difco/ Beckton Dickinson	214040	
Sodium acetate x 3 hydr.	Carl Roth	6779.1	
Sodium sulfate	MERCK	1066495000	
Toluene	MERCK	1083252500	
<b>mTY medium:</b> 3 g L <sup>-1</sup> yeast extract, 5 g L <sup>-1</sup> bacto tryptone and 50 mM NaCl			
Yeast extract	Merck	1037530500	
Tryptone	Serva	4864702	
Sodium chloride	Carl Roth	3957.1	
ImageJ with logi tool plugin			<a href="http://rsb.info.nih.gov/ij/download.html">http://rsb.info.nih.gov/ij/download.html</a> and <a href="http://downloads.openmicroscopy.org/bio-formats/4.4.10">http://downloads.openmicroscopy.org/bio-formats/4.4.10</a>
<i>Pythium ultimum</i> strain 67-1			Obtained from the lab of Dr. Christoph Keel; Department of Fundamental Microbiology, University of Lausanne, Switzerland
<i>Burkholderia sartisoli</i> RP037-mChe			Obtained from the lab of Prof. Jan Roelof van der Meer; Department of Fundamental Microbiology, University of Lausanne, Switzerland