

WCSB, Wageningen University	IBISBA-SOP-WU11
	Version 1.0

EPP - Standard Operating Procedure

(only for selected experiments intended to transfer results from one lab to the other)

Title: Cleaning of electroporation cuvettes

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Instruction

Cleaning of electroporation cuvettes

1. Introduction / Purpose

This protocol describes how to properly clean electroporation cuvettes after use. After cleaning, they can be used again.

Keywords: electroporation – cuvette - cleaning

2. Equipment and chemicals

2.1. Equipment

- Small diameter pipe cleaner
- 60° or 65° incubator

2.2. Chemicals

- 70% EtOH

2.3 Other materials

Special consumables

- Sterilization pouch (eg. <https://nl.vwr.com/store/product/12446476/sterilisation-pouches-self-seal>)

3. Procedures

- Fill dirty cuvette with water
- Empty cuvette in liquid waste container
- Fill cuvette with EtOH
- Let it stand for a few minutes
- Clean cuvette with pipe cleaner, empty cuvette in sink
- Rinse cap and cuvette with EtOH
- Rinse cap and cuvette with hot water
- Rinse cap and cuvette with EtOH, shake as much EtOH out of the cuvette as possible
- Put cap on cuvette
- Dry the outside of cuvette + cap with paper
- Put up to six cuvettes in one sterilisation pouch (or less/more, depending on size of pouch)
- Seal pouch by sticking the glued part (remove strip of white paper first) half on the plastic and half on the paper. Also see instructions on pouch.

- Put pouch in 60°C-65°C incubator for one night to dry and pasteurize cuvettes
- When you need a clean cuvette, peel the bag open at the end opposite of the one where you closed the bag.

5. Remarks / troubleshooting

- Don't start the cleaning process with EtOH, because it will cause precipitation of cells and DNA, making it more difficult to clean the cuvette
- Clean cuvettes as soon as possible after using them because dried dirt is difficult to remove
- Make sure that the water from step 1 does not end up in the sink because there are viable transformed cells in it
- Autoclave waste water
- EtOH can be put down the drain
- When the aluminum part of the cuvette starts to show signs of corrosion, throw it away. Also throw away cuvettes when the transformation efficiency suddenly decreases.

6. Biosafety

No biosafety issues are associated with this protocol.

7. Acknowledgements



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