**Supplementary Material**

**S1: Contamination of the test objects**

**1. Materials used to prepare the test soils**

- Sheep's blood heparinised with 10 IU heparin/ml. Preferably pooled blood, i.e. a mixture of the blood of several animals, should be used (e.g. Acila GmbH, Fiebig Nährstofftechnik, Germany). The quality of the blood should meet the criteria required in [3, 4]

- Protamine hydrochloride or protamine sulphate, added amount 15 IU /ml blood (e.g. Protamine Valeant 1000 I.U. /ml from Valeant Pharmaceuticals Germany GmbH)

- Test organism: *Enterococcus faecium (E. faecium*) (ATCC 6057, DSM 2146)

**2.1. Preparation of the test soils for test objects to demonstrate cleaning performance (protein detection)**

The heparinized sheep blood, the protamine solution and the physiological saline solution are brought to room temperature and mixed well. The following quantities are used for the soiling of one test objects:

- 11,4 ml heparinized sheep³s blood

- 0,42 ml 0,9 % NaCl solution

- 0.18 ml protamine solution with 180 IU

All solutions are pipetted one after the other into a beaker and mixed thoroughly but carefully to avoid bubbles and shear forces. After adding the protamine, a stopwatch is started immediately to determine the coagulation time. After mixing, an aliquot of 100 μl is taken from the test soiling and diluted in 9.9 ml 1% SDS solution to subsequently determine the protein content of the test soiling by the OPA method.

**2.2. Preparation of the test soils for test objects to demonstrate the disinfection performance (reduction factor)**

The heparinized sheep blood, the protamine solution and the prepared bacterial suspension with *E. faecium* are brought to room temperature and mixed well. The following quantities are used for the soiling of one test sample:

- 11,4 ml heparinized sheep³s blood

- 0,42 ml bacteria suspension

- 0.18 ml protamine solution with 180 IU

All components are pipetted one after the other into a beaker and mixed thoroughly but carefully to avoid bubbles and shear forces. After adding the protamine, a stopwatch is started immediately to determine the coagulation time. After mixing, an aliquot of 1 ml of the test soiling is taken and diluted in 9 ml NaCl solution to determine the colony count in the test soiling.

**3. Contamination of the test objects**

The test objects are first marked at one end (e.g. by means of cable ties) and fitted with silicone hose adapters to enable the injection of the test soiling with a syringe. The weight of the PTFE tubes thus prepared is determined on a balance. The soiling of the PTFE tubes is done in horizontal position. 10 ml of the test soiling is drawn up with a 10 ml disposable syringe and injected into each PTFE tube. After 30 seconds incubation, 10 ml of air is drawn up with the syringe twice in succession and injected into the PTFE tube to blow out excess test soiling, which is collected in a beaker. To determine the coagulation time, the beaker containing the test soiling is swiveled slightly. The onset of coagulation is indicated by a gel-like solidified surface. The time until the onset of coagulation is documented together with the room temperature. Complete coagulation must occur in less than 30 minutes and is indicated by a firm and no longer gelatinous consistency. Otherwise, the test soiling and the blood batch must be discarded. After soiling, the test samples are incubated horizontally at room temperature for one hour to ensure complete coagulation of the test soiling. Subsequently, a patency test is carried out in deviation to DIN ISO/TS 15883-5. For this purpose, 20 ml of air is drawn up in a syringe of this volume and slowly injected into the test objects. Blocked test objects must be discarded. Subsequently, the weight of the soiled test objects is determined by weighing to determine the amount of test soiling contained.