Surfactants M. (not ionic) TT M377

0.1 - 7.5 mg/L Triton X-100

TBPE

Instrument specific information

The test can be performed on the following devices. In addition, the required cuvette and the absorption range of the photometer are indicated.

Instrument Type	Cuvette	λ	Measuring Range
MD 600, MD 610, MD 640, MultiDirect, SpectroDirect, XD 7000, XD 7500	ø 16 mm	610 nm	0.1 - 7.5 mg/L Triton X-100

Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
Surfactants (non ionic) Spectroquant 1.01787.0001 tube test [d]	25 pc.	420764

Application List

- Waste Water Treatment
- Galvanization

Preparation

1. Before performing the test read the original test instructions (delivered with the test) and the MSDS (available at www.merckmillipore.com).
2. Appropiate safety precautions and good lab technique should be used during the whole procedure.
3. Because reaction depends on temperature, sample and tube temperature must be between 20 and 25 °C.
4. The test sample should have a pH value between 3 and 9.

Notes

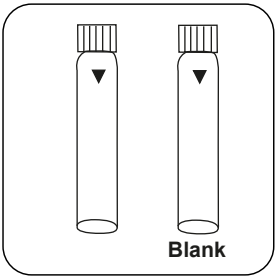
1. This method is adapted from MERCK.
2. Spektroquant® is a registered trade mark of the company MERCK KGaA.
3. Sample volume should always be metered by using volumetric pipette (class A).
4. Triton® is a registered trade mark of the company DOW Chemical Company.

Determination of Non-ionic surfactants with MERCK Spectroquant® Cell Test, No. 1.01787.0001

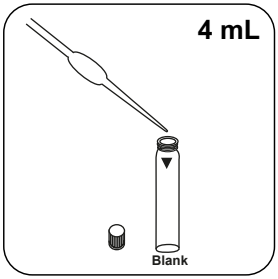
Select the method on the device.

For this method, a ZERO measurement does not have to be carried out every time on the following devices: XD 7000, XD 7500

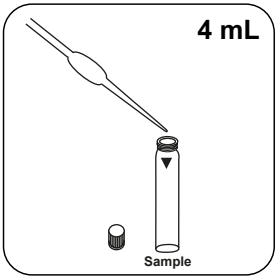
Skip steps with Blank.



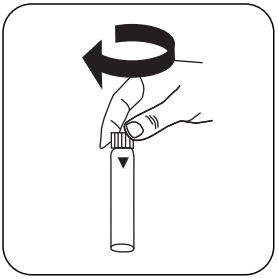
Prepare two **reaction vials**. Mark one as a blank.



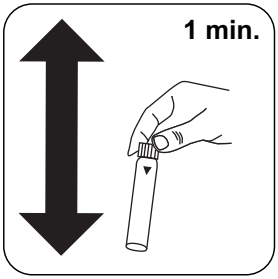
Put **4 mL deionised water** in the blank.



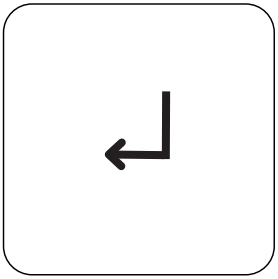
Put **4 mL sample** in the sample vial.



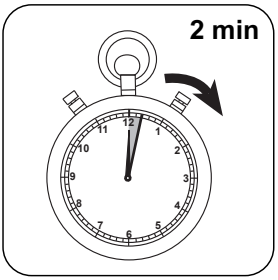
Close vial(s).



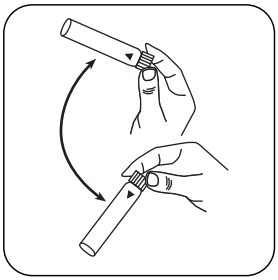
Mix the contents by shaking vigorously. (1 min.).



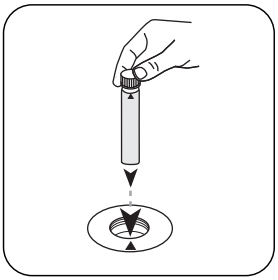
Press the **ENTER** button.



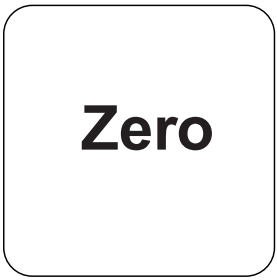
Wait for **2 minute(s) reaction time**.



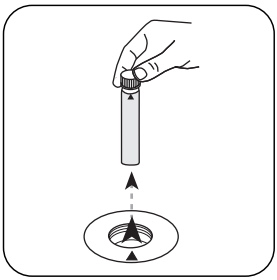
Invert **zero cuvette**.



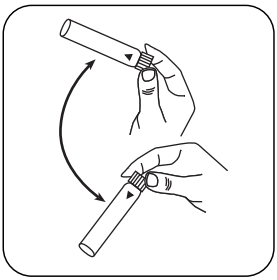
Place **blank** in the sample chamber. • Pay attention to the positioning.



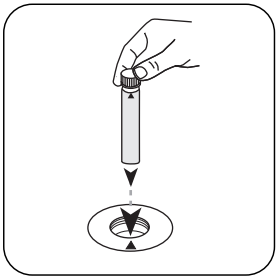
Press the **ZERO** button.



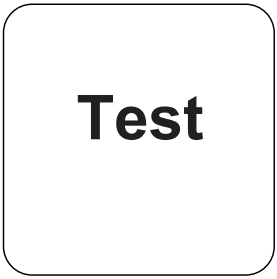
Remove **vial** from the sample chamber.



Invert the **sample vial** .



Place **sample vial** in the sample chamber. • Pay attention to the positioning.



Press the **TEST** (XD: **START**)button.

The result in mg/L Triton X-100 appears on the display.

Analyses

The following table identifies the output values can be converted into other citation forms.

Unit	Cite form	Scale Factor
mg/l	NP10	1.1

Chemical Method

TBPE

Appendix

Calibration function for 3rd-party photometers

Conc. = a + b•Abs + c•Abs^2 + d•Abs^3 + e•Abs^4 + f•Abs^5

	ø 16 mm
a	$5.64524 \cdot 10^{-2}$
b	$5.9893 \cdot 10^{+0}$
c	
d	
e	
f	

According to

DIN EN 903:1994

[d] Spectroquant® is a Merck KGaA Trademark