

**Cyanide L****M157****0.01 - 0.5 mg/L CN⁻****Pyridine-barbituric Acid****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	ø 24 mm	580 nm	0.01 - 0.5 mg/L CN ⁻
SpectroDirect, XD 7000, XD 7500	ø 24 mm	585 nm	0.01 - 0.5 mg/L CN ⁻

Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
Cyanide Reagent Test 585 nm	1 pc.	2418874

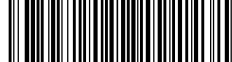
Application List

- Waste Water Treatment
- Raw Water Treatment
- Galvanization

Notes

1. Only free Cyanide and Cyanides that can be destroyed by Chlorine are determined by this test.
2. The reagents are to be stored in closed containers at a temperature of +15 °C – +25 °C.

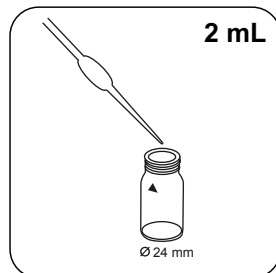




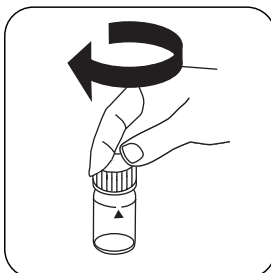
Determination of Cyanide with Reagents test

Select the method on the device.

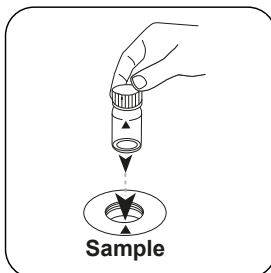
For this method, a ZERO measurement does not have to be carried out every time on the following devices: XD 7000, XD 7500



Put **2 mL sample** and **8 mL of deionised water** in the sample vessel.



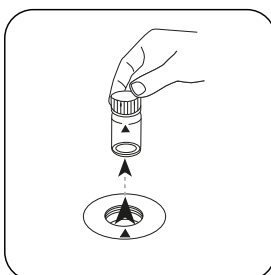
Close vial(s).



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

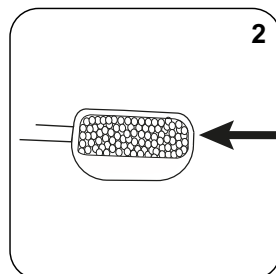


Press the **ZERO** button.

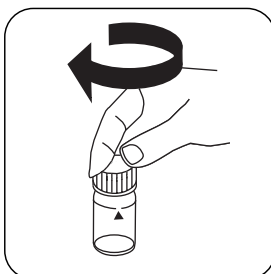


Remove the vial from the sample chamber.

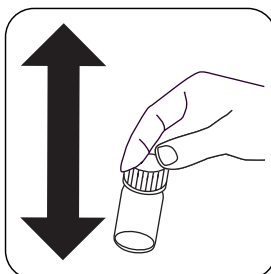
For devices that require **no ZERO measurement**, **start here**.



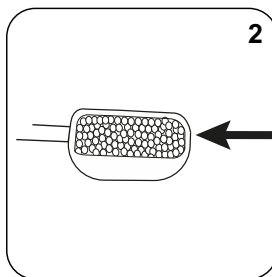
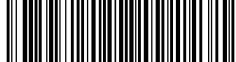
Add **2 level measuring scoop No. 4 (white) Cyanide-11**.



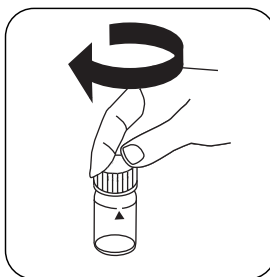
Close vial(s).



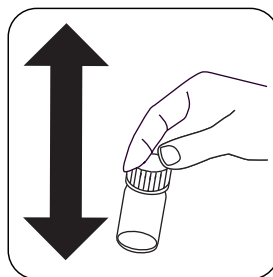
Mix the contents by shaking.



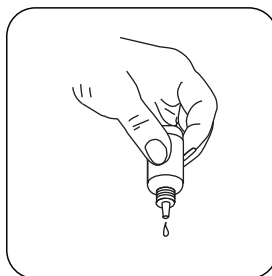
Add **2 level measuring scoop No. 4 (white) Cyanide-12**.



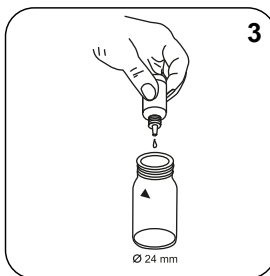
Close vial(s).



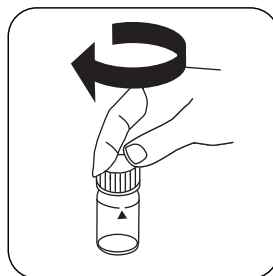
Mix the contents by shaking.



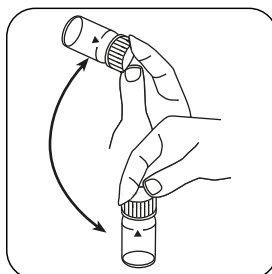
Hold cuvettes vertically and add equal drops by pressing slowly.



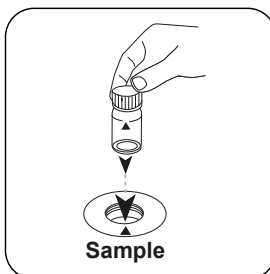
Add **3 drops Cyanide -13**.



Close vial(s).



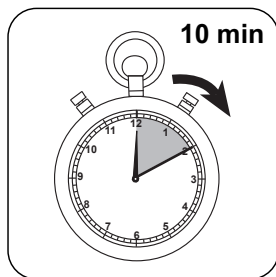
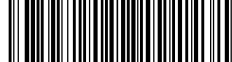
Invert several times to mix the contents.



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



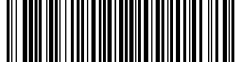
Press the **TEST** (XD: **START**) button.



Wait for **10 minute(s)**
reaction time.

Once the reaction period is finished, the measurement takes place automatically.

The result in mg/L Cyanide appears on the display.



Chemical Method

Pyridine-barbituric Acid

Appendix

Calibration function for 3rd-party photometers

$$\text{Conc.} = a + b \cdot \text{Abs} + c \cdot \text{Abs}^2 + d \cdot \text{Abs}^3 + e \cdot \text{Abs}^4 + f \cdot \text{Abs}^5$$

	ø 24 mm	□ 10 mm
a	$-6.23212 \cdot 10^{-3}$	$-6.23212 \cdot 10^{-3}$
b	$4.2154 \cdot 10^{-1}$	$9.06311 \cdot 10^{-1}$
c	$6.94008 \cdot 10^{-3}$	$3.20805 \cdot 10^{-2}$
d		
e		
f		

Interferences

Removeable Interferences

- Thiocyanate, heavy metal complexes, sulphide, colourants or aromatic amines interfere with the test. In the presence of an interfering substance, the cyanide must be separated out by distillation before the test is carried out.

Derived from

DIN 38405-D13