

Standard Solution for the NanoPhotometer® N120

The Standard Solution is available in the following package:


N-120-S including ten vials, 5x 1ml Standard Solution I and 5x 1ml Standard Solution II

The Standard Solution I & II is used to verify the absorbance accuracy of the NanoPhotometer® N120. It is included in the IQ/OQ documentation for the NanoPhotometer® N120.

Hazardous information: Please read the Material Safety Data Sheet carefully prior to using this product.

All required information about the Standard Solution is available on the Standard Solution box label:

Example label:



Standard Solution I & II for the NanoPhotometer N120	
Potassium hydrogen phthalate (PHP)	
Item No:	N-120-S
CAS-No:	877-24-7
Solution I: Lot No	1903
10 mm Abs. (280nm) @ 20-25°C	4.77 A
Solution II: Lot No	1905
10 mm Abs. (280nm) @ 20-25°C	22.60 A
Expiration date:	March 2021
Implen GmbH, Schatzbogen 52, D-81829 München, Germany	

Note: Specifications for the Standard Solution are guaranteed for one year. Please refer to expiration date on the box. Once a vial is opened, the Standard Solution can be used for 30 minutes. For most accurate results, the NanoPhotometer® should be turned on 15 minutes prior to taking the readings.

Check of Absorbance Accuracy:

1. Open Method: Protein UV
2. Set the following parameter: OD1, wavelength 280 nm, Background Correction: On, Sample Loading: horizontally
3. Prepare samples:

Before opening a vial, mix it vigorously and make sure that the whole liquid collects at the bottom of the vial. Break the vial carefully at the predetermined breaking point (white line).

Caution: Danger of injury at the breaking edge!

Aliquot 80 µl of Standard Solution I & II and water (blank) in 0.2 ml stripes (12 tubes).

Note: Once the Standard Solutions are in 80 µl aliquots use it within 10 minutes.

4. Clean measurement head (sample window and mirror) with 70% Ethanol and subsequently with clean water.
5. Blank with 2 µl water. Use a multichannel pipette for applying the blank.
6. Clean measurement head (sample window and mirror) with lint free tissue
7. Apply 2 µl Standard Solution I. Use a multichannel pipette for applying the sample. Close the sample arm immediately and measure. Result should be within +/- 5% of the certified absorbance value.
8. Clean measurement head (sample window and mirror) with 70% Ethanol and subsequently with clean water
9. Apply 2 µl Standard Solution II. Use a multichannel pipette for applying the sample. Close the sample arm immediately and measure. Result should be within +/- 7% of the certified absorbance value.
10. Clean measurement head (sample window and mirror) with 70% Ethanol and subsequently with clean water

Note: To achieve best and certified absorbance values all readings must be taken within a temperature range of 20°C – 25°C.

Ordering Information:

Item Number:	Description:
N-120-S	Standard Solution I (5 x 1 ml) and Standard Solution II (5 x 1 ml) for the control of the photometric accuracy of the NanoPhotometer® 120 (NanoVolume)

For questions please contact the Implen Support Team: support@implen.de / +49-89-7263718-20