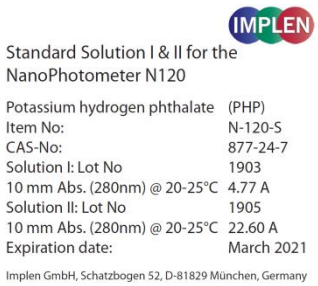
Standard Solution for the NanoPhotometer® N120

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 Solutions I & II are used to verify the absorbance accuracy of the NanoPhotometer® N120.
This 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 below:



Note: The expiration date will always be at least 12 months from the date of shipment. For the exact expiration date, please refer to the label 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 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 all liquid collects at the bottom of the vial. Break the vial carefully at the predetermined breaking point (indicated by a white line).

Caution: **Risk of injury at the breaking edge**!

Aliquot 80 µl of Standard Solution I & II and water (blank) into 0.2 ml strips (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 wipe.
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 ±10% of the certified absorbance value.

Note: Measurements of standard solutions (steps 6-9) should be performed at least in triplicate. This is to account for random errors, thereby increasing the reliability of the measurements and allowing for a more accurate evaluation of your device's performance.

10. Clean measurement head (sample window and mirror) with 70% Ethanol and subsequently with clean water.

Note: To achieve optimal and certified absorbance values all measurements 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

Implen GmbH
Schatzbogen 52
D-81829 München

telephone: +49-89-7263718 0
fax: +49-89-7263718 54
email: support@implen.de
www.implen.de