

Standard Solution for the NanoPhotometer® NP80/N60/N50

The Standard Solution is available in two packages:

N-568-S2 including two vials and

N-568-S including ten vials

The Standard Solution is used to verify the absorbance accuracy of the NanoPhotometer® NP80/N60/N50 NanoVolume options. It is included in the IQ/OQ documentation for the NanoPhotometer® NP80 (N-80-Q) and N60 (N-60-Q).

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:

Standard Solution for the
NanoPhotometer NP80/N60/N50



Potassium hydrogen phthalate (PHP)
Item No: N-568-S2
CAS-No: 877-24-7
Lot No: 1702
10 mm Absorbance (280nm): 21.73 A
@ 20 - 25°C
Expiration date: see label

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 Absorbance Accuracy:

1. Open Method: More Apps => Wavelength
2. Set the following parameters: Dilution 15 (NP80/N60) and Dilution 140 (N50); Wavelength 280 nm; Baseline Correction 377nm; Smoothing 1
3. Clean measurement head (sample window and mirror) with 70% Ethanol and subsequently with clean water.
4. Blank with 1.5 µl water.
5. Clean measurement head (sample window and mirror) with lint free wipe.
6. Apply 1.5 µl water, close the sample arm immediately and measure as a sample. The resulting spectra should be flat, with no noticeable peaks or artefacts. This is to ensure that your blank sample measurement was successful. Clean measurement head (sample window and mirror) with lint free wipe.
7. 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!

8. Apply 1.5 µl Standard Solution. Close the sample arm immediately and measure. Result should be within ± 5% (dilution 15) and ±10% (dilution 140) of the certified absorbance value.

Note: Measurement of the standard solution 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.

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

Note: To achieve optimal and certified absorbance values, measurements must be taken within a temperature range of 20 – 25°C.

Ordering Information:

Item Number:	Description:
N-568-S	Standard Solution (10 x 0.5 ml) for the control of the photometric accuracy of the NanoPhotometer® NP80, N60 and N50 (NanoVolume)
N-568-S2	Standard Solution (2 x 0.5 ml) for the control of the photometric accuracy of the NanoPhotometer® NP80, N60 and N50 (NanoVolume)

For questions please contact the Implen Support Team:
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