

Freezeing Point Depression

0.000 ... -5.000 °C

ISO 5764 • IDF 108

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Definition

CAL Standard Solutions

Freezeing Point Depression Standards are used to calibrate freezeing point determination devices, such as those used in the food industry.

The reference method is described, for example, in ISO 5746 / IDF 108. In addition to the freezeing point reduction values specified in the standards, any standard value from 0.000 to -5.000 °C can be produced as a custom-made product.

The standard solutions can be used universally regardless of the measuring method or the instrument technology.

CTRL Controls

Freezeing Point Depression Controls are not used for calibration, but for controlling the analysis procedure. They usually differ in that the target value is not printed on the label. This can only be assigned via the Certificate of Analysis (COA) using the batch number (ring test principle of the unknown sample).

OEM Special Manufacturing

Freezeing Point Depression Standards and Controls are offered in 8 ml portion packs or 250 ml bottles. Other fillings are also possible.

On request we manufacture all calibration values as special production. Target groups for this are equipment manufacturers/distributors and inter-laboratory organisations. For this we ask for your inquiry.

Principle

The Freezeing Point Depression Standards indicate the values of the freezeing points in °C (Celsius), e.g. FP = - 0.408 °C.

The freezeing point reduction for this example is 0.408 K (Kelvin) or 408 mK (Milli-Kelvin).

The standard solutions are based on sodium chloride (NaCl) in water (Aqua p.a.).

Freezeing Point Depression Standards are not produced by us according to rounded literature references, but according to precisely calculated recipes and are subject to internal quality control.

Certificates of analysis are available for the Freezeing Point Depression Standards.



Download via Link: <http://www.lotdocs.com/biorapid>.

Specifications

The shelf life in the original sealed condition is indicated on the label. Each filling is marked with a traceable LOT/batch number.

Portion Vials 8 ml 

The contents must be used immediately after opening. Portion containers are marked with the sign "For single use only". Any leftovers must be discarded after opening.

Standard bottles 250 ml

Open standard bottles only shortly for removal by pouring. Avoid contamination! Bottle contents ≤ 25 % must be used immediately or discarded.

Shelf life after opening

A defined shelf life after opening the bottles cannot be specified. This depends on the contamination and other factors. We therefore recommend the use of portion vials.

Storage

Store in the package protected from light. See package label for storage temperature.



Risks and Safety

Please observe the necessary precautions for use of laboratory reagents. Applications should be performed by expert personnel only. Follow the national and laboratory internal guidelines for work safety. Wear suitable protective clothing and disposable gloves while handling.



www.sds-id.com

For additional safety information please refer to the information on the label and the corresponding Safety Data Sheet (SDS).

The safety settings were made according to legal guidelines. If there are differences in the labeling or the safety information between the label and SDS, the details of the SDS are valid.

Download by QR-Code or link:

www.sds-id.com/150048-3 (Freezeing Point Depression Standard 0.000 ... -5.000 °C)

Contents/Main Components

Standards & Controls All Freezeing Point Depression Standards & Controls contain water (Aqua p.a.) and NaCl. The concentrations correspond to the freezeing point depression indicated on the label.

Product information Freezeing Point Depression

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(en)

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Application

Standards are used for calibration/adjustment of the freezing point determination device to a defined calibration value. As a rule, the instruments are calibrated/adjusted to a calibration value required according to the measuring range.

Please also refer to the instructions for use of your freezing point determination device.

Portion Vials

1. Remove the required quantity of portion vials from the package.
2. Gently mix the portion vials by tilting them several times to mix in any condensate and to achieve homogeneous concentration ratios.
3. Open and use portion vials only immediately before use.
5. Discard residual contents. These can no longer be used due to evaporation and the low residual content.

Standard Bottles

1. Before use, mix the contents by tilting them several times to mix in any condensate and to achieve homogeneous concentration ratios.
3. Do not open the bottle until immediately before use and remove only by pouring.
5. Residual contents $\leq 25\%$ must be consumed immediately or discarded. These can no longer be used due to evaporation and the low residual content.

Notes

This product information exclusively relates to the reagent described in this leaflet. In particular, this product information cannot be applied to similar reagents from other manufacturers.

Periodically check for updates of this product information on our website.

Instruction for Use

For professional use only.

To avoid errors, the use of qualified personnel is carried out. National guidelines for work safety and quality assurance must be followed.

The used equipment must comply with the state of technology and the laboratory requirements.

All samples and used tubes/vials must be marked clearly identifiable to exclude any confusion.

Classifications

- no -

Symbols and Graphic Indicia

List of symbols and graphic labels see at section safety in the download area of our website.

Support /Information service

For methodological and technical support, please contact us by eMail at support@biorapid.de or by fax (German, English).

Periodically check for updates of this product information on our website.

Waste Management

Please observe your national laws and regulations.

Used and expired solutions must be disposed of in accordance with your local regulations.

Inside the EU, national regulations apply that are based on the current, amended version of Council Directive 67/548/EEG on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances.

Decontaminated packaging can be disposed of as household waste or recycled, unless otherwise specified.

Ordering Information

Available Osmolality Calibration Standards can be found on our website. Other calibration values available on request.

Literature & Footnotes

Legends for the graphic symbols and tags used follow relevant norms or are available on our internet pages.

*1) Glass breakage symbol only valid for fillings in glass.

[1] ISO/DIN 5764.

[2] IDF 108.

Feedback

Since the applications are very diverse, we are interested to receive your feedback by eMail: support@biorapid.de (German, English). Proposals will be considered for further development.