

# S-Monovette® RNA Exact Freezing conditions

## Freezing between 0°C and -39°C

- S-Monovette® RNA Exact stabilised blood samples should not be stored between 0°C and -39°C, because it cannot be ensured that the molecular movement in the sample is sufficiently reduced in this temperature range. The sample integrity is optimally ensured below -40°C.
- For a storage period of up to 2 weeks, we recommend refrigerating the samples (4-8°C).

## Freezing at temperatures of -40°C and below

- For long-term storage, it is possible to freeze the S-Monovette® RNA Exact stabilised blood samples at temperatures of -40°C and below.
- For storing samples in the S-Monovette®, a storage temperature of -80°C is recommended. The S-Monovettes must be frozen in an upright position in open, non-insulating racks (preferably wire racks). Once frozen, they may be stored horizontally. Use suitable racks that ensure that the contents freeze evenly or from bottom to top and allow the S-Monovettes sufficient space for expansion. If the Monovette® freezes at the top first due to unfavourable freezing conditions, expansion cracks may develop at the bottom.
- For deep freezing at temperatures up to -196°C we recommend storing the samples exclusively in SARSTEDT CryoPure tubes optimised specifically for cryogenic storage.
- The samples should also be thawed in an upright position. Avoid warming the sample material above room temperature.

## Multiple thawing and re-freezing

- Multiple thawing and re-freezing for removing aliquots of the sample material is possible without loss of quality.
- Please see further information in our Application Note:  
<https://www.sarstedt.com/produkte/diagnostik/venenblut/s-monovetter/produkt/01.2048.001/>

SARSTEDT AG & Co. KG  
P.O. Box 12 20  
D-51582 Nümbrecht  
Phone: +49 2293 305 0  
Fax: +49 2293 305 3992  
export@sarstedt.com  
www.sarstedt.com