





QSee 8-Mix Reference Standard Mixture
For Research Use Only. Not for use in clinical diagnostic procedures.

Instructions for Use

QSee™ 8-Mix



Language: en

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Document history

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The following table describes important changes from the previous revision of this document.

	List of changes	
F	First Edition	

Use of trademarks

The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

1 Product description

QSee 8-Mix is a component of the QSee Performance Test solution. QSee 8-Mix is a reference standard mixture consisting of 8 polyester dendrimers based on bis-MPA, shipped neat and dried down in one vial. The purpose of use is to test the system performance of Bruker LC-MS setups in an easy and streamlined way.

The compounds come with a total amount of 5 µg per vial and must be aliquoted before use. The content of one vial can be aliquoted with purified water into instrument dependent portions. These are ready to use and can be stored in the freezer for future QC test runs.

While the handling of the QSee 8-Mix is described in this document, the complete workflow to perform QC testing with the QSee 8-Mix solution is described in the QSee Performance Test Software Tutorial¹.

Ordering information

Product	Part Number	
QSee 8-Mix	1907338	

2 Intended use

The intended use for QSee 8-Mix is to test the system performance of Bruker LC-MS systems in conjunction with QSee Performance Test software.

3 Inspection, storage, and stability

3.1 Inspection on arrival

Check the QSee 8-Mix package on arrival. If it is damaged, check the vial. If the vial is damaged, QSee 8-Mix must not be used. Dispose of the QSee 8-Mix following the guidelines outlined in the Safety Data Sheet for the product and contact Bruker Daltonics GmbH & Co. KG (ms.sales.bdal@bruker.com) for a replacement.

3.2 Storage on arrival

QSee 8-Mix is shipped at ambient temperature. The expiry date on the package is valid for the product when stored in the freezer at -18°C on arrival. Please keep the vial in a clean place in the laboratory.



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¹The QSee Performance Test Software Tutorial is installed with the QSee Performance Test Software. If not available, contact Bruker Application Support to obtain a copy of the QSee Performance Test Software Tutorial

3.3 Storage after aliquoting

After aliquoting in LC-MS grade water, QSee 8-Mix is stable in solution at -18 °C for up to one year. It is recommended to aliquot the mix under an extractor hood and without the presence of other chemical compounds to avoid any cross- contamination.



4 Risk and safety information

According to Regulation (EC) No 1272/2008, QSee 8-Mix is not classified as a hazardous substance or mixture. Nevertheless, it is recommended to apply the typical precautions.

Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Avoid breathing in dust.

For more information, please read the Safety Data Sheet available for download at www.bruker.com/care.

Follow good laboratory practice and general safety regulations when handling chemicals or biohazardous material.

5 Field of application

QSee 8-Mix is used as a reference standard mixture for system performance testing of Bruker LC-MS setups. These tests are performed with QSee Performance Test software and also require a Bruker LC column and an LC device. For supported configurations and more information on the complete workflow, please refer to the QSee Performance Test Tutorial¹.

¹The QSee Performance Test Software Tutorial is installed with the QSee Performance Test Software. If not available, contact Bruker Application Support to obtain a copy of the QSee Performance Test Software Tutorial

6 Aliquoting protocol for the QSee 8-Mix reference standard mixture

This procedure describes the aliquoting of the QSee 8-Mix into instrument dependent portions. These aliquots are ready to use and can be stored in the freezer at -18 °C or below.

Chemicals and materials required

- QSee 8-Mix reference standard mixture (# 1907338)
- HPLC-MS grade water, ultrapure. Either purchased or from an ultrafiltration device.

Equipment and Tools Required

- Pipette (1000 µL), pipette tips
- Pipette (e.g. 10-100 μL), pipette tips
- · Vortex mixer or ultrasonic bath
- · Benchtop centrifuge for aliquots
- · Labels for vials and storage box
- Screw-cap vials with septum to store the aliquots. Glass vials with micro inserts (e.g. 300 μL) or with V-bottom are recommended.

6.1 General procedure for aliquoting

Due to the different instrument performance, the injection volume is different for timsTOF HT and timsTOF Pro 2 systems. To ensure enough sample amount per aliquot, the aliquoting process differs for the instrument types step (3).

- Add 1000 μL of HPLC-MS grade water to the QSee 8-Mix vial.
- (2) Vortex for at least 60 seconds. The resulting solution should be clear.
 - **Note** You can centrifuge the vial at 3000 rpm for about 5 minutes (at room temperature) to exclude solid particles or dust from the aliquots.
- (3) The aliquoted volume differs depending on the instrument type that is used. Each aliquot allows for a complete QC test run with a total of 6 injections.
 - For timsTOF HT users: Pipet 25 μL of the solution into prepared and labelled vials.
 - For timsTOF Pro 2 users: Pipet 30 μL of the solution into prepared and labelled vials.
- (4) Close the vials and store them labelled with the following information:
 - QSee 8-Mix lot number from the package label.
 - the use-by date, which is date of aliquoting plus 12 months.
 - · the date of aliquoting
 - ID of operator performing the aliquoting

No air bubble should be visible. Dispel air bubbles by gently tapping the glass. Always store the vials in an upright position in a freezer box.

- (5) To use the reference standard mixture, take one aliquot vial from the freezer and allow it to thaw at room temperature for about 5 minutes. Ensure the solution is clear of floating particles or air bubbles before placing the vial into the autosampler. Dispel any bubbles by gently tapping the glass.
- (6) Insert the vial into the required vial position in the autosampler.
- (7) After use, store a vial with residual material in the freezer.

6.2 Recommendations

The QSee Performance Test solution is used with sensitive instruments to identify their current performance and also to track the long-term development of system performance. As contamination will influence the results, we recommend the following:

- 1. Use only high quality disposables and materials to avoid contamination.
- 2. Use only glass containers for aliquots.
- 3. Use V-bottom vials or maximum recovery vials for aliquoting to ensure full recovery of the material from the vials.

7 Disposing of product and packaging

General Disposal



Dispose of any unused product, waste, and shipping materials in accordance with country, state, and local regulations.

Packaging disposal



Please dispose of all packaging in accordance with local recycling regulations.

The above instructions for disposal apply to EU member states. Correct disposal of this product will help conserve natural resources and ensure that it is recycled in a manner that prevents potential negative consequences for the environment and human health. For more information, please contact your local waste disposal service.

8 Symbols

The following symbols are used in the labeling:

REF	Catalogue number	LOT	Batch code
RUO	Research Use Only	[]i	Consult instructions for use
<u>^</u>	General warning		Manufacturer
1	Temperature range		Recycling
	Use-by date		•

9 Manufacturer



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Descriptions and specifications supersede all previous information and are subject to change without notice.

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