QUICK GUIDE

Trajan CB Emitters



Introduction

Thank you for choosing Trajan CB Emitters. Featuring a constant internal diameter - known as 'constant bore'- Trajan CB emitters are designed to resist clogging and reduce instrument downtime.

Inside this Quick Guide, you will find essential safety information, instructions for proper use, and practical troubleshooting tips.

Intended use

Trajan CB Emitters (ID: 10 µm & 20 µm) are designed specifically for low flow applications and offer premium performance and robustness.

Important

Safety information

- It is recommended to wear safety glasses and gloves when handling the emitters in case of unintended breakage.
- In the event of an emitter breakage or replacement, observe local requirements for disposal of glass.

Handling and operational precautions

- Finger-tightening is recommended. Overtightening of the emitter can cause fractures, leading to higher risk of dead-volume and instrument contamination.
- Small ID emitters can lead to higher backpressure in the system if partial blockages occur. High backpressure can cause the emitter to dislodge from the fitting/connection.

Sample preparation and cleanliness

Even with constant bore emitters, proper sample preparation remains essential as clog resistance can vary depending on the properties of the sample. The constant bore design minimizes the risk of clogs.

Instructions

1. It is recommended to avoid using metallic tweezers when handling emitters; this can cause irreversible damage to the fused-silica and/or metallic coatings.



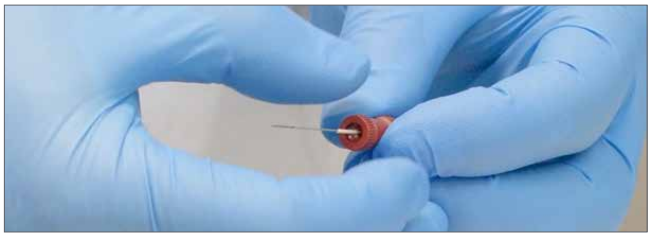
2. Open the lid of the emitter packaging tearing the perforations in the label.



3. Carefully remove the emitter from packaging with non-conductive tweezers. Avoid touching the metal coating (where applicable) and tip of the emitter.



4. Carefully install the emitter using the PEEK sleeve and zero dead volume (ZDV) union, ensuring proper alignment and avoiding overtightening.



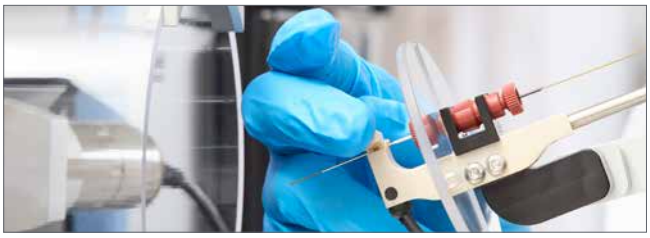
For further information visit **www.trajanscimed.com/emitters**

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5. Connect the complete assembly securely to the ion source, ensuring proper alignment.



ACCESSORIES (FOR INSTALLATION)		
Part number	**Description**	**Qty**
063302	Trajan CB Emitter PEEK sleeve, 1/32" OD x 0.38 mm ID x 20 mm L	5

Storage and stability

Packaging should be stored at room temperature and ideally in a clean environment.

It is recommended to close the packaging lid when not actively retrieving an emitter to avoid contamination of the emitters with airborne dust and debris.

Disposal

Refer to local regulations for disposal in an approved waste disposal facility or service. Please recycle the packaging where possible.

Troubleshooting

For most issues, consult the instrument troubleshooting guide.





For drops in performance:

a. Turn off the voltage, check for a droplet accumulating at the tip. If there is a droplet at the tip, the flow is not blocked. Check for any damage to the emitter tip under a microscope and discard if damaged.

If there is no droplet at the tip with the voltage off:

b.i Check for liquid accumulating at the emitter connection point. If there is liquid accumulating, tighten and/or remake the connection.

b.ii If there is no liquid accumulating, untighten the emitter connection and check if there is any liquid at the transfer line. If there is liquid at the transfer line, then the emitter is blocked. Discard the emitter.

b.iii If no liquid is observed at the transfer line, then check the remainder of the connections upstream as per instrument manual.

Information and support

For assistance connecting your emitter to the mass spectrometer, or for troubleshooting support, contact **techsupport@trajanscimed.com**

For further information visit **www.trajanscimed.com/emitters**

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