

Mini-Spike® 2

For a safer and more convenient drug admixture.



Protective Admixture Tools

Mini-Spike® 2

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1. Diluent injection



2. Drug reconstitution



3. Drug withdrawal

Drug admixture is a very important and common step in IV therapy.

Pharmacies and wards need to admix numerous drugs quickly with easy to use and cost effective products. Healthcare management pays particular attention to safety for patients and hospital care workers as several risks may occur during drug admixture.

As shown in literature¹, using a safety device helps to prevent the risks of sharps injuries, chemical, microbiological and particulate contamination.

Associated risks for the patient from drug admixture:

- *Particulate contamination:* Serious damage to various organs due to the presence of particles (plastic, rubber, undissolved drugs^{2,3,4}).
- *Microbiological contamination:* Nosocomial infection⁵ if the device cannot be properly disinfected.

Associated risks for the healthcare worker during drug admixture:

- *Chemical contamination:* Dermatitis⁶, antibiotics hypersensitivity⁷, urinary mutagenicity may lead to cancer and untoward pregnancy (congenital malformation up to miscarriage)⁸.
- *Sharps injuries:* Using needles may lead to severe bleeding⁹.

For risk prevention throughout the process of manual drug admixture, B. Braun introduces Mini-Spike® 2 with a swabable needlefree access valve.

The swabable valve reduces the risk of nosocomial infection^{10,11} for the patient through the disinfection process and provides, with its automatic closure, better protection against chemical contamination for the healthcare worker.

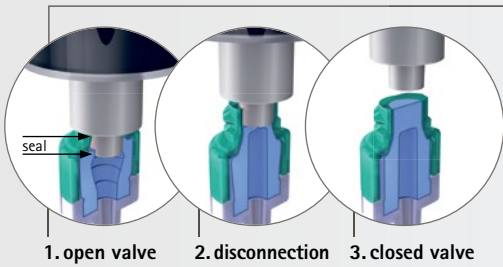
Additionally, Mini-Spike® 2 offers the same features and handling as Mini-Spike® by preventing sharps injuries with its needlefree system, and reduces the risk of particulate contamination through its 5 µm fluid filter*.

*Fluid filter with Mini-Spike® 2 Filter and Mini-Spike® 2 Chemo

Safety Benefits

- Minimizes chemical and microbiological contamination
- Minimizes particulate contamination
- Prevents sharps injuries
- Intuitive and convenient needlefree handling

Swabable valve and its **automatic closure** upon syringe disconnection minimize the risk of chemical and microbiological contamination.



Swabable access valve provides a more effective barrier against microbial contamination.

Needlefree design eliminates the risk of sharps injuries through the admixture process.

Color coding for easier differentiation between the product range.

Large handling area provides a comfortable grip.

0.45 µm Air Filter

Air filter* minimizes the risk of toxic aerosol release and makes pressure balancing technique unnecessary.

*0.45 µm air filter with ref. 4550590 and 4550591, 0.2 µm air filter with ref. 4550592

Protective cap protects against contamination.



Two-lumen spike for easy piercing of stoppers and effective flow through the air and fluid* filters.

*Fluid filter with ref. 4550591 and 4550592

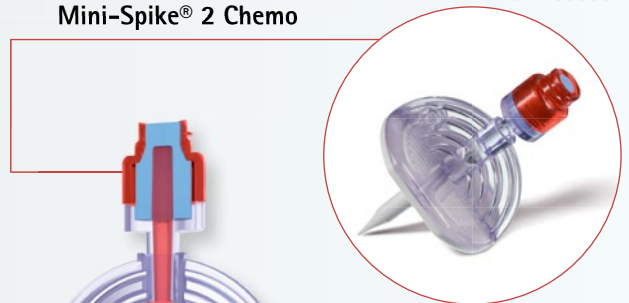
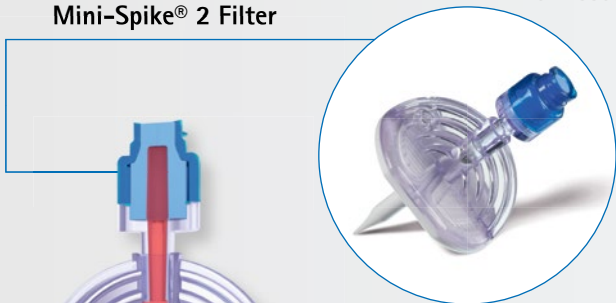
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Mini-Spike® 2 Filter

Mini-Spike® 2 Chemo



0.45 µm Air Filter

Fluid filter retains particles bigger than 5 µm (e.g. rubber or undissolved drug).

5 µm Fluid Filter

0.2 µm Air Filter

Fluid filter retains particles bigger than 5 µm (e.g. rubber or undissolved drug).




5 µm Fluid Filter

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| Product specifications | |
|---|--|
| Priming volume | 0.705 ml |
| Residual volume in device (tested with NaCl 0.9 %) | Mini-Spike® 2 ≤ 0.45 ml Mini-Spike® 2 Filter/ Chemo ≤ 0.10 ml |
| Residual volume in vial (tested with Aqua ad iniectionabilia / Residual volume depends on the size of the vial and the withdrawal position) | ≤ 0.5 ml |
| Flow rate (tested with NaCl 0.9 %) | ≥ 5 ml/sec |
| Sealing performance of valve | 2 bar pressure resistance after 200 activations with a standard Luer connector |
| Biocompatibility | Proven according to ISO 10993-1 |
| Material specifications | PVC-, DEHP- and Latex-free |

For further information, please contact your local representative.

| Ordering Information | Mini-Spike® 2 | Mini-Spike® 2 Filter | Mini-Spike® 2 Chemo |
|----------------------------------|---|--|---|
| Product Picture and Color Coding |  |  |  |
| Air Filter | 0.45 µm | 0.45 µm | 0.2 µm |
| Fluid Filter | - | 5 µm | 5 µm |
| Code No. (REF) | 4550590 | 4550591 | 4550592 |
| Units per box | 50 | 50 | 50 |



For more information about risk prevention in infusion therapy, visit:

www.safeinfusiontherapy.com

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