**Intended Use**

The VACUETTE® EVOPROTECT SAFETY Blood Collection/Infusion Set is indicated for venous blood collection and/or the short-term infusion of intravenous fluids. It is to be used by appropriately trained healthcare professionals in accordance with the instructions.

**Product Description**

The VACUETTE® EVOPROTECT SAFETY Blood Collection/Infusion Set is a single-use, sterile, winged needle bonded to flexible tubing with a luer connector and a semi-automatic release safety mechanism. The winged needle is designed with a safety mechanism, which allows for one-handed activation ensuring the needle is covered immediately following venipuncture and/or infusion to aid in the protection against accidental needlestick injury.

It is available in various combinations. The VACUETTE® EVOPROTECT SAFETY Blood Collection/Infusion Set is individually wrapped, sterile and can be used with a luer system (e.g. HOLDEX®).

<table>
<thead>
<tr>
<th>VACUETTE® EVOPROTECT SAFETY Blood Collection /Infusion Set</th>
<th>Individually wrapped and sterile allowing set to be used with a luer system.</th>
</tr>
</thead>
<tbody>
<tr>
<td>VACUETTE® EVOPROTECT SAFETY Blood Collection Set + Luer Adapter</td>
<td>Individually wrapped and sterile with Luer Adapter (for use with e.g. Standard Tube Holder).</td>
</tr>
<tr>
<td>VACUETTE® EVOPROTECT SAFETY Blood Collection Set + Holder</td>
<td>Individually wrapped and sterile ready to be used for blood collection.</td>
</tr>
</tbody>
</table>

The VACUETTE® EVOPROTECT SAFETY Blood Collection/Infusion Set is not made with natural rubber latex or DEHP.

**Procedure**

1. Remove VACUETTE® EVOPROTECT SAFETY Blood Collection/Infusion Set from packaging.
2. Check to make sure that the device is not damaged.

*NOTE:* If individual packaging has been opened or tampered with, please choose another device.

For Blood Collection

1. Select site for venipuncture. Apply tourniquet and prepare site with appropriate antiseptic. DO NOT PALPATE SITE AFTER CLEANSING.
2. Select appropriate tube(s) and VACUETTE® EVOPROTECT SAFETY Blood Collection/Infusion Set and, if necessary, connect it to the desired collection system.
3. Carefully remove needle cap from safety-winged needle.
4. Perform venipuncture by holding product either by the wings or by the body of the device just behind the wings with patient’s arm in downward position. Flashback will confirm successful venipuncture, depending on the patient’s venous pressure.
5.Immobilize the winged needle when necessary.
6. Collect blood according to your facility’s procedure. REMOVE Tourniquet AS SOON AS BLOOD APPEARS IN TUBE. Always hold in place by pressing the tube with the thumb to ensure complete vacuum draw. *NOTE:* The first tube in the series will be under-filled due to the dead volume of the flexible tubing. A discard tube (no additive) is recommended to be drawn prior to ensure the proper anticoagulant to blood ratio.
7. After completion, place gauze over collection site without applying pressure.
8. The product is intended for in-vein activation. With one hand, activate the safety mechanism by pressing the blue-colored release buttons. TAKE CARE NOT TO HINDER THE AUTOMATIC RETRACTION.
9. The safety mechanism will slide backward until an audible click is heard. The click is a sign that the safety mechanism has been correctly activated.
10. Apply gentle pressure to the puncture site using the gauze pad according to facility protocol.
11. Promptly dispose of VACUETTE® EVOPROTECT SAFETY Blood Collection/Infusion Set in an approved disposal container in accordance with the procedures of your facility.

For short-term IV Infusion (without prior blood collection)

For infusion purposes, aseptically remove any male device (Luer Adapter or Luer Adapter + Holder), if present, from the set prior to connection to the female luer port.

Carefully remove needle protective cap from safety-winged needle. Prime set in accordance with the policies and procedures of your facility. Make sure that there is no air in the system during infusion.

<table>
<thead>
<tr>
<th><em>Maximum Priming Volume (ml)</em></th>
<th><em>Maximum Flow Rate (ml/min)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tubing</td>
<td>21G</td>
</tr>
<tr>
<td>10 cm / 4 inch</td>
<td>0.21</td>
</tr>
<tr>
<td>19 cm / 7.5 inch</td>
<td>0.33</td>
</tr>
<tr>
<td>30 cm / 12 inch</td>
<td>0.46</td>
</tr>
</tbody>
</table>

*approximated values established with water
1. Unless blood collection has been carried out beforehand and the needle remains within the vein, perform venipuncture by holding product either by the wings or by the body of the device just behind the wings with patient’s arm in downward position. Ensure that the infusion set is securely attached to the patient. Ensure that the safety mechanism is not covered with tape.

2. Begin short term IV infusion.

   **NOTE:** Please follow your facility’s procedures. However, it is recommended that the device be used for single infusion purposes for a maximum of 4 hours.

3. After completion of infusion, place the gauze over the insertion site without applying pressure and terminate the procedure (see points 6-10 under blood collection above).

### Blood Collection: In-Vein Activation of Safety Mechanism

When the blood collection has been completed and no subsequent infusion is intended, it is recommended to activate the safety mechanism while the VACUETTE® EVOPROTECT SAFETY Blood Collection/Infusion Set is still in the patient’s vein.

<table>
<thead>
<tr>
<th>1a OR 1b</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform venipuncture by holding product either by the wings or by the body of the device just behind the wings (with patient’s arm in downward position). Take care not to obstruct the safety mechanism of the device. Flashback will confirm successful venipuncture, depending on the patient’s venous pressure.</td>
<td>Immobilize the wings when necessary. Collect blood according to your facility’s procedure.</td>
<td>After completion, place gauze over collection site without applying pressure. The product is intended for in-vein activation. With one hand, activate the safety mechanism by pressing the blue colored release buttons. <strong>TAKE CARE NOT TO HINDER THE AUTOMATIC RETRACTION.</strong> The safety mechanism will slide backwards until an audible click is heard. The click is a sign that the safety mechanism has been correctly activated.</td>
<td>Apply gentle pressure to the puncture site using the gauze pad according to facility protocol. Dispose of device in a sharps container per facility procedure.</td>
</tr>
</tbody>
</table>
Short term Infusion: In-Vein Activation of Safety Mechanism

When the infusion has been completed, it is recommended to activate the safety mechanism while the **VACUETTE® EVOPROTECT SAFETY Blood Collection/Infusion Set** is still in the patient’s vein.

<table>
<thead>
<tr>
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<th>3</th>
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<tbody>
<tr>
<td>1a OR 1b. Perform venipuncture by holding product either by the wings or by the body of the device just behind the wings (with patient's arm in downward position). Take care not to obstruct the safety mechanism of the device. Flashback will confirm successful venipuncture, depending on the patient's venous pressure.</td>
<td>Infusion for a maximum of up to four hours</td>
<td>After completion, place the gauze over the insertion site without applying pressure. The product is intended for in-vein activation. With one hand, activate the safety mechanism by pressing the blue colored release buttons. TAKE CARE NOT TO HINDER THE AUTOMATIC RETRACTION. The safety mechanism will slide backwards until an audible click is heard. The click is a sign that the safety mechanism has been correctly activated.</td>
<td>Apply gentle pressure to the puncture site using the gauze pad according to facility protocol. Dispose of device in a sharps container per facility procedure.</td>
</tr>
<tr>
<td>2. Assure that the infusion set is securely attached to the patient. Ensure that the safety mechanism is not covered with tape. Begin short term IV infusion for a maximum of up to 4 hours.</td>
<td>3.</td>
<td>4.</td>
<td></td>
</tr>
</tbody>
</table>

**Precautions/Cautions**

- The device will perform as intended when the instructions are followed accordingly.
- Refrain from carelessly releasing the lock or forcefully pulling the wing, as such actions may damage the integrity of the device.
- Examine individual package for integrity prior to use. If packaging has been damaged, do not use.
- Any used needle is considered contaminated. Discard all used sets in biohazard containers approved for their disposal.
- Do not forcefully release or re-activate the safety mechanism after it has been activated.
- Keep hands behind needle at all times during use and disposal.
- It is recommended to activate the safety mechanism while the **VACUETTE® EVOPROTECT SAFETY Blood Collection/Infusion Set** is still in the patient’s vein to avoid blood or IV fluid droplets.
- Do not use for subcutaneous infusion or injection.
- Handle all biological samples and blood collection “sharps” (lancets, needles, luer adapters, and blood collection sets) according to the policies and procedures of your facility.
- Obtain appropriate medical attention in the case of any exposure to biological samples (for example, through a puncture injury), since they may transmit HIV (AIDS), viral hepatitis, or other infectious disease.
- Do not reuse. Reuse of the product may cause harmful infections or injury.
- Gloves should be worn at all times during venipuncture to minimize exposure hazard.
- Avoid blood leakage and any air in the tubing during infusion procedure or when changing from blood collection to infusion.
- Caution must be taken when collecting blood samples from immobilized, haemophilic or epileptic patients.
- Due to the risk of surface contamination from residual blood that may be on the needle tip, it is recommended to dispose of the needle following activation of the safety activation mechanism with the tip directed upwards.
- IV infusion procedures should be done according to the policies and procedures of your facility.
- For hygienic changing of accessories, avoid blood leakage and follow the instructions of your facility.
- Make sure all air is removed by priming prior to use as short-term IV infusion device.
- If blood collection and infusion are done with the same set, the infusion must follow the blood collection immediately.
- Prior to infusion, make sure that there are no clots in the system.
- Do not collect blood after infusion.
Storage before use

Store at 4–25°C (40–77°F).

NOTE: Avoid exposure to direct sunlight. Exceeding the maximum recommended storage temperature may lead to impairment of the VACUETTE® EVOPROTECT SAFETY Blood Collection/Infusion Set quality.

Label information

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Temperature limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use-by date</td>
<td>Do not re-use</td>
</tr>
<tr>
<td>Batch code</td>
<td>Do not use if package is damaged</td>
</tr>
<tr>
<td>Catalogue number</td>
<td>Consult instructions for use</td>
</tr>
<tr>
<td>Sterilized using irradiation</td>
<td>Keep away from sunlight</td>
</tr>
<tr>
<td>Rx Only Precripotion device</td>
<td></td>
</tr>
</tbody>
</table>

Literature:
CLSI GP41, 7th Edition Collection of Diagnostic Venous Blood Specimens

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