The SURFLASH SAFETY I.V. CATHETER is inserted into the patient’s vascular system for short term use (<30 days) to withdraw blood samples, administer fluids intravenously, or monitor blood pressure by attaching a monitoring line. The needle shaft cover and tip shield feature aids in the prevention of needle stick injuries. These catheters may be used for any patient population with consideration given to adequacy of vascular anatomy and appropriateness for the solution being infused and duration of therapy. The 18 to 22 gauge catheters are suitable for use with power injectors rated for a maximum of 325 psi. This device is for single use only. Radio-opaque. Non pyrogenic.

**FIGURE A**

1. Aseptic technique, proper skin preparation and continued protection of the puncture site are essential throughout the procedure. Taking proper precautions against contamination, remove product from the package.

2. Hold needle housing at the Finger Grips and remove needle protector in a straight, forward motion (**Figure A**). Inspect the catheter assembly, and ensure the push tab bevel indicator is in the “up” position.

**FIGURE B**

3. Continue to grasp the needle housing on the Finger Grips and use a low angle approach for vessel access. Observe initial flashback in the transparent flash chamber indicating successful needle tip entry into the vessel. Observe second flashback along the catheter indicating proper catheter tip entry into the vessel (**Figure B**).

**FIGURE C**

4. Maintain hold on the finger grip area and advance the catheter forward off the needle into the vessel (**Figure C**).

**FIGURE D**

5. Release tourniquet. With non-dominant hand, apply digital pressure just beyond the catheter tip and secure the catheter hub. With dominant hand grasp at finger grip and pull needle in a straight outward motion until needle tip is completely shielded by the safety cover and automatically detaches from hub (**Figure D**).

Dispose of the shielded inner needle component immediately into the appropriate sharps container. Connect an administration set and secure.

*Be careful not to withdraw the needle at an angle.*

*If the safety mechanism fails to activate, immediately dispose of the product in the appropriate method.*

**WARNINGS:**

- HANDLE WITH CARE TO AVOID NEEDLESTICKS.
- DO NOT REPLACE ORIGINAL NEEDLE COVER AFTER USE.
- USE ONCE AND DISCARD IMMEDIATELY IN ACCORDANCE WITH LOCAL SAFETY STANDARDS.

**CAUTIONS:**

- Do not loosen catheter from needle prior to advancing into the vein.
- Remove product from the protector withdrawing carefully, in a straight backward motion.
- If safety mechanism fails to activate, dispose of the product appropriately.
- To assure activation of safety mechanism; withdraw the inner needle with care while avoiding an extreme angle or a rotating motion.
- Do not attempt to re-insert a partially or a completely withdrawn needle.
- To prevent infection, do not touch the safety cover of the needle after withdrawal.
- Do not reuse.
- Do not use if unit package is damaged.
- This product contains metal material. Careful attention should be paid when using the product where Magnetic Resonance Imaging (MRI) is anticipated.

**PRECAUTIONS:**

- Keep hands behind needle at all times during use and disposal.
- Observe Universal Precautions on ALL patients.
- Do not store at extreme temperatures and humidity.
- Change catheter according to CDC guidelines and/or institution protocols.
- Sterile, if package is intact, undamaged.
SurFlash® Plus Usage Guide

The SURFLASH PLUS SAFETY I.V. CATHETER is inserted into the patient’s vascular system for short term use (<30 days) to withdraw blood samples, administer fluids intravenously, or monitor blood pressure by attaching a monitoring line. The needle shaft cover and tip shield feature aids in the prevention of needle stick injuries. These catheters may be used for any patient population with consideration given to adequacy of vascular anatomy and appropriateness for the solution being infused and duration of therapy. The 18 to 22 gauge catheters are suitable for use with power injectors rated for a maximum of 325 psi. This device is for single use only. Radio-opaque. Non pyrogenic.

DEVICE DESCRIPTION: The SurFlash Plus Safety I.V. Catheter is designed to reduce blood leakage once at insertion. Blood flow from the catheter hub will be restricted by the single use valve immediately after the inner needle is removed. To minimize possibility of blood leakage, complete a secure luer connection in less than 30 seconds. The flow path is permanently opened once a secure luer connection is made. Apply digital pressure once flow path is open.

1. Aseptic technique, proper skin preparation and continued protection of the puncture site are essential throughout the procedure. Taking proper precautions against contamination, remove product from the package.
2. Hold needle housing at the Finger Grips and remove needle protector in a straight, forward motion (Figure A). Inspect the catheter assembly, and ensure the push tab bevel indicator is in the “up” position.
3. Continue to grasp the needle housing on the Finger Grips and use a low angle approach for vessel access. Observe initial flashback in the transparent flash chamber indicating successful needle tip entry into the vessel. Observe second flashback along the catheter indicating proper catheter tip entry into the vessel (Figure B).
4. Maintain hold on the finger grip area and advance the catheter forward off the needle into the vessel (Figure C).

*Be careful not to withdraw the needle at an angle.
*If the safety mechanism fails to activate, immediately dispose of the product in the appropriate method.

5. Release tourniquet. With non-dominant hand, apply digital pressure just beyond the catheter tip and secure the catheter hub. With dominant hand grasp at finger grip and pull needle in a straight outward motion until needle tip is completely shielded by the safety cover and automatically detaches from hub (Figure D).

WARNING: HANDLE WITH CARE TO AVOID NEEDLESTICKS.

CAUTIONS:
• Do not loosen catheter from needle prior to advancing into the vein.
• Remove product from the protector withdrawing carefully, in a straight backward motion.
• If safety mechanism fails to activate, dispose of the product appropriately.
• To assure activation of safety mechanism; withdraw the inner needle with care while avoiding an extreme angle or a rotating motion.
• Do not attempt to re-insert a partially or a completely withdrawn needle.
• To prevent infection, do not touch the safety cover of the needle after withdrawal.
• Do not reuse.
• Do not use if unit package is damaged.

PRECAUTIONS:
• Keep hands behind needle at all times during use and disposal.
• Observe Universal Precautions on ALL patients.
• Do not store at extreme temperatures and humidity.
• Change catheter according to CDC guidelines and/or institution protocols.
• Sterile, if package is intact, undamaged.

Based on Instructions for Use issued August 2012