BD Hazardous Drug Safety product catalog

Protecting your greatest assets

BD

They're your team—working each day to deliver the highest-quality care. And when they prepare or administer hazardous drugs, they need and deserve to be protected.

The BD Hazardous Drug Safety (HDS) portfolio is designed to help you reduce the risk of hazardous drug exposure. It includes the BD PhaSeal™ system—the most published closed-system drug transfer device (CSTD)—as well as the flexible and efficient Texium™ system.

Our experts can tailor a solution for your facility that balances your needs for personnel safety, workflow efficiency and cost. So your greatest assets can focus on the job at hand—improving outcomes and saving lives.
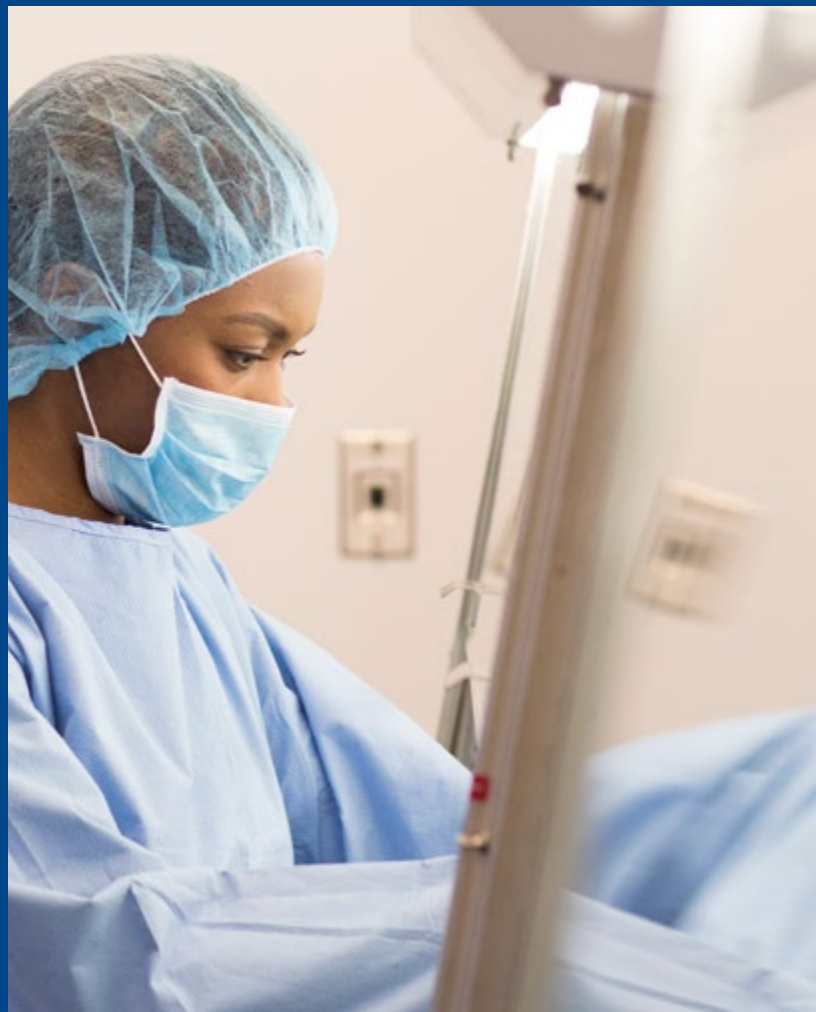
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The BD PhaSeal system

The BD PhaSeal system is an airtight and leakproof CSTD that utilizes a membrane-to-membrane technology. It mechanically prohibits the transfer of environmental contaminants into the system and the escape of drug or vapor concentrations outside the system, thereby minimizing individual and environmental exposure to drug vapor aerosols and spills.

It also prevents microbial ingress within an ISO Class V environment using proper aseptic technique. The system is supported by more than 25 peer-reviewed, published studies and according to a recent U.S. survey, is the most widely used CSTD brand for drug preparation.[1]

1. State of Pharmacy Compounding. CSTDs for drug preparation. *Pharmacy Purchasing & Products.* April 2017: S25. www.pppmag.com

Drug vial access devices

The BD PhaSeal protector is a pressure-equalization device that is permanently attached to the vial. It is used in the preparation of drugs from either powder or liquid form. The protector establishes and maintains neutral pressure when air or fluid is injected into or aspirated from the vial.
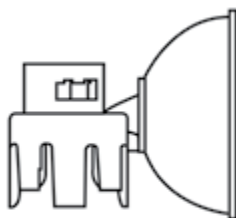
BD PhaSeal protectors

REF 515100
Protector P14

Packaging	Quantity
Shelf pack	50 ea
Case	200 ea

STERILE EO · LATEX · BPA

Vial adapter for closed reconstitution and pressure equalization. For drug vials with **neck diameter of Ø13 mm**. When attached to a vial, protector P14 has an **equalizing capacity of 20 mL of air.** Blue cap.

REF 515102
Protector P21

Packaging	Quantity
Shelf pack	50 ea
Case	200 ea

STERILE EO · LATEX · BPA

Vial adapter for closed reconstitution and pressure equalization. For drug vials with **neck diameter of Ø20 mm**. When attached to a vial, protector P21 has an **equalizing capacity of 20 mL of air.** Red cap.
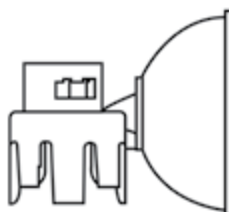

REF 515103
Protector P21 multipack

Packaging	Quantity
Shelf pack	5 ea
Case	250 ea

STERILE EO · LATEX · BPA

Vial adapter for closed reconstitution and pressure equalization. For drug vials with **neck diameter of Ø20 mm**. When attached to a vial, protector P21 has an **equalizing capacity of 20 mL of air.** Red cap.

REF 515105
Protector P50

Packaging	Quantity
Shelf pack	25 ea
Case	100 ea

STERILE EO · LATEX · BPA

Vial adapter for closed reconstitution and pressure equalization. For drug vials with **neck diameter of Ø20 mm**. When attached to a vial, protector P50 has an **equalizing capacity of 50 mL of air.** Green cap.
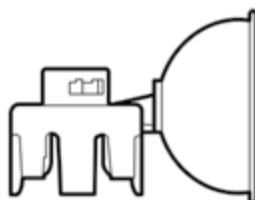

BD PhaSeal protectors

REF 515106
Protector P50 multipack

Packaging	Quantity
Shelf pack	5 ea
Case	150 ea

STERILE EO · LATEX · BPA

Vial adapter for closed reconstitution and pressure equalization. For drug vials with **neck diameter of Ø20 mm.** When attached to a vial, protector P50 has an **equalizing capacity of 50 mL of air.** Green cap.
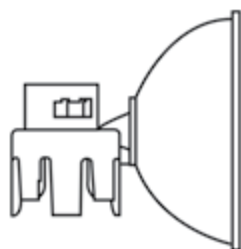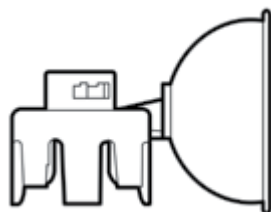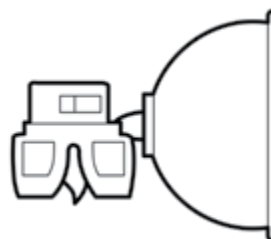
REF 515117
Protector P55

Packaging	Quantity
Shelf pack	25 ea
Case	100 ea

STERILE EO · LATEX · BPA

Vial adapter for closed reconstitution and pressure equalization. For drug vials with **neck diameter of Ø20 mm.** When attached to a vial, protector P55 has an **equalizing capacity of 50 mL of air.** Mint green cap. The P55 contains a plastic spike to help reduce coring and fragmentation.

REF 515104
Protector P28

Packaging	Quantity
Shelf pack	25 ea
Case	100 ea
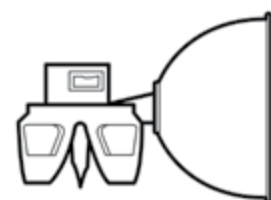
STERILE EO · LATEX · BPA

Vial adapter for closed reconstitution and pressure equalization. For drug vials with **neck diameter of Ø28 mm.** When attached to a vial, protector P28 has an **equalizing capacity of 60 mL of air.** White cap.

BD Hazardous Drug Safety product portfolio

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Syringe safety devices

The BD PhaSeal injector ensures a closed transfer of the drug by means of double elastomeric membranes.

BD PhaSeal injectors

REF 515003
Injector luer lock N35

Packaging	Quantity
Shelf pack	50 ea
Case	200 ea
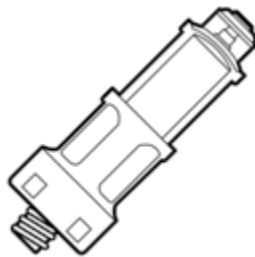
STERILE EO · LATEX · BPA

Transfer device that attaches to a disposable syringe or IV tubing with a standard luer lock connection.

REF 515005
Injector luer lock N35C multipack

Packaging	Quantity
Shelf pack	5 ea
Case	250 ea
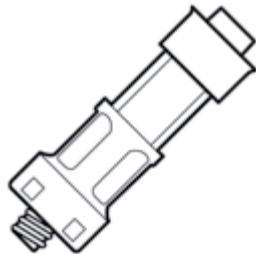
STERILE EO · LATEX · BPA

Transfer device that attaches to a disposable syringe or IV tubing with a standard luer lock connection.

IV bag / line access devices

BD PhaSeal administration products ensure closed transfer to infusion bags and closed administration of the drug via the patient's IV line.
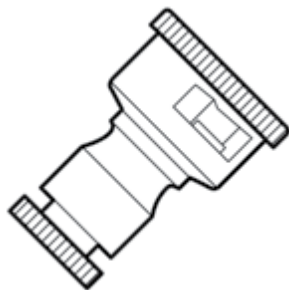
BD PhaSeal administration products

REF 515200
Connector luer lock C35

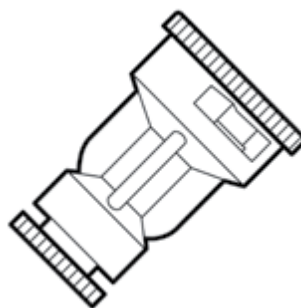| Packaging	Quantity
Shelf pack	50 ea
Case	200 ea

STERILE EO · LATEX · BPA

Attaches to the patient's IV line, providing a closed connection to the injector. Standard luer lock connection.

REF 515202
Connector luer lock C45

Packaging	Quantity
Shelf pack	50 ea
Case	200 ea

STERILE EO · LATEX · BPA

Attaches to the patient's IV line, providing a closed connection to the injector. Standard luer lock connection. This connector is designed for use with needlefree ports with internal pistons.

REF 515301
Secondary set drip chamber C60

Packaging	Quantity
Shelf pack	20 ea
Case	80 ea

STERILE EO · LATEX · BPA · PHT

Secondary set with built-in BD PhaSeal connector for closed transfer to IV bag.

Total length: 102 cm
Priming volume: 12.5 mL
Drops / mL: 20

REF 515304
Y-site connector C80

Packaging	Quantity
Shelf pack	30 ea
Case	120 ea

STERILE EO · LATEX · BPA · PHT

Extension tubing with built-in BD PhaSeal connector.

Total length: 21 cm
Priming volume: 1.6 mL

BD PhaSeal administration products

REF 515306
Infusion adapter C100

Packaging	Quantity
Shelf pack	50 ea
Case	100 ea
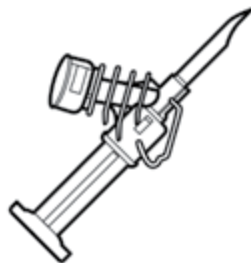
STERILE EO · LATEX · BPA

Connection between IV bag and non-vented infusion set. Built-in BD PhaSeal connector for closed transfer to IV bag.

REF 515307
Infusion adapter C100 multipack

Packaging	Quantity
Shelf pack	5 ea
Case	250 ea

STERILE EO · LATEX · BPA

Connection between IV bag and non-vented infusion set. Built-in BD PhaSeal connector for closed transfer to IV bag.

System accessories

BD PhaSeal accessories help aid in the preparation, transport and administration of hazardous drugs.
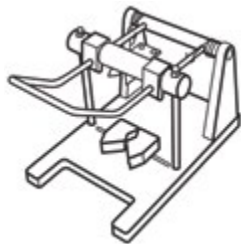
BD PhaSeal accessories

REF 515400
Assembly fixture M12

Packaging	Quantity
Shelf pack	N/A
Case	1 ea

Mechanical device used for consistent and simple attachment of a protector to a drug vial. Non-sterile.

REF 515401
Syringe tray M15

Packaging	Quantity
Shelf pack	N/A
Case	80 ea
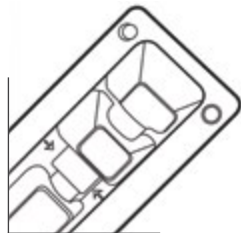
The syringe tray is used to transport the filled syringe to the administration area. Designed to accommodate **1 mL – 30 mL syringes** with injector luer lock (N35). Non-sterile.

BD PhaSeal accessories

REF 515403
Infusion clamp M25

Packaging	Quantity
Shelf pack	25 ea
Case	100 ea

Clamp for securing the connection of injector luer lock N35 to the connector. Non-sterile.

REF 515404
Cap for injector membrane M50

Packaging	Quantity
Shelf pack	50 ea
Case	200 ea

Protects membrane on injector from direct contact with contaminated surfaces during transport and storage.

REF 515405
Hanger for IV bag M55

Packaging	Quantity
Shelf pack	40 ea
Case	160 ea

Hanger for securing the IV bag on the IV pole.

The Texium system

The Texium system utilizes mechanical valve technology to protect healthcare workers and patients. It features a needlefree luer lock connection on all vial adapters, the option for bonded syringes and the SmartSite™ needlefree connector for nursing. For Alaris™ pump customers, the Texium system components can be integrated into the administration sets to aid in workflow and prevent accidental disconnections to the infusion line.

When Texium and SmartSite are paired together, they provide a leak-free, drip-free connection and disconnection.

The system provides pharmacists and nurses with a flexible, simple and cost-effective solution.

Drug vial access devices

Our vial access devices come in single- or multi-dose configurations, in closed and vented sizes (non-vented, vented and VialShield) that fit a variety of drug vials and needs. The Texium drug vial access devices are used in the preparation of hazardous drugs from powder or liquid form. Our vented vial access device works with our Texium closed male luer to form a closed system that lets you safely access drug vials. The SmartSite VialShield vial access device is a pressure-equalization device that is permanently attached to the vial. This device establishes and maintains neutral pressure when air or fluid is injected into or aspirated from the drug vial.
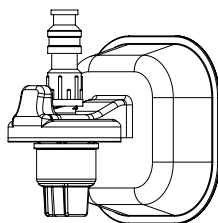
SmartSite VialShield vial access devices

REF MV0513

Packaging	Quantity
Shelf pack	N/A
Case	50

STERILE EO · LATEX · BPA · PHT

13 mm closed vial access device. Vial adapter for closed reconstitution and pressure equalization. For drug vials with **neck diameter of Ø13 mm.** When attached to a vial, it has an **equalizing capacity of 60 mL of air.**

REF MV0520

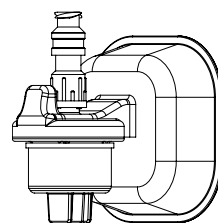| Packaging	Quantity
Shelf pack	N/A
Case	50

STERILE EO · LATEX · BPA · PHT

20 mm closed vial access device. Vial adapter for closed reconstitution and pressure equalization. For drug vials with **neck diameter of Ø20 mm.** When attached to a vial, it has an **equalizing capacity of 60 mL of air.**

REF MV0528

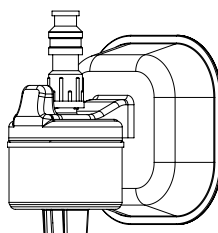| Packaging	Quantity
Shelf pack	N/A
Case	50

STERILE EO · LATEX · BPA · PHT

28 mm closed vial access device. Vial adapter for closed reconstitution and pressure equalization. For drug vials with **neck diameter of Ø28 mm.** When attached to a vial, it has an **equalizing capacity of 60 mL of air.**
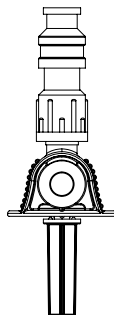
SmartSite vented vial access devices

REF MV0400

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT

Universal vented vial access device. Compatible with **neck diameter of Ø13 mm, Ø20 mm and Ø28 mm vial closures.** 0.2-micron hydrophobic air-venting filter.

REF MV040010
multipack

Packaging	Quantity
Shelf pack	10
Case	100

STERILE EO · LATEX · BPA · PHT

Universal vented vial access device. Compatible with **neck diameter of Ø13 mm, Ø20 mm and Ø28 mm vial closures.** 0.2-micron hydrophobic air-venting filter.

REF MV0413

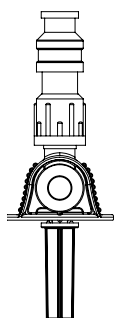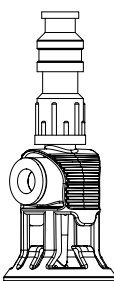| Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT

13 mm vented vial access device. Vial adapter for reconstitution. For drug vials with **neck diameter of Ø13 mm.**

SmartSite vented vial access devices

REF MV0420

Packaging	Quantity
Shelf pack	N/A
Case	100
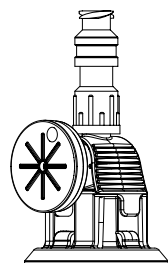
STERILE EO · LATEX · BPA · PHT

20 mm vented vial access device. Vial adapter for reconstitution.
For drug vials with **neck diameter of Ø20 mm.**

REF MV042005
multipack

Packaging	Quantity
Shelf pack	5
Case	100

STERILE EO · LATEX · BPA · PHT

20 mm vented vial access device. Vial adapter for reconstitution.
For drug vials with **neck diameter of Ø20 mm.**

REF MV0428

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT

28 mm vented vial access device. Vial adapter for reconstitution.
For drug vials with **neck diameter of Ø28 mm.**

SmartSite non-vented vial access devices

REF 2203E

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
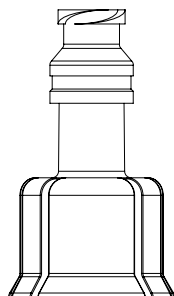
13 mm non-vented vial access device. Vial adapter for reconstitution. For drug vials with **neck diameter of Ø13 mm.**

REF 2205E

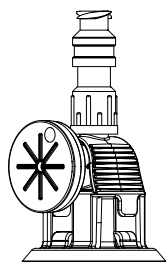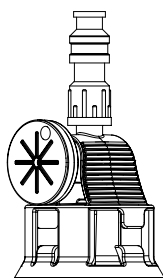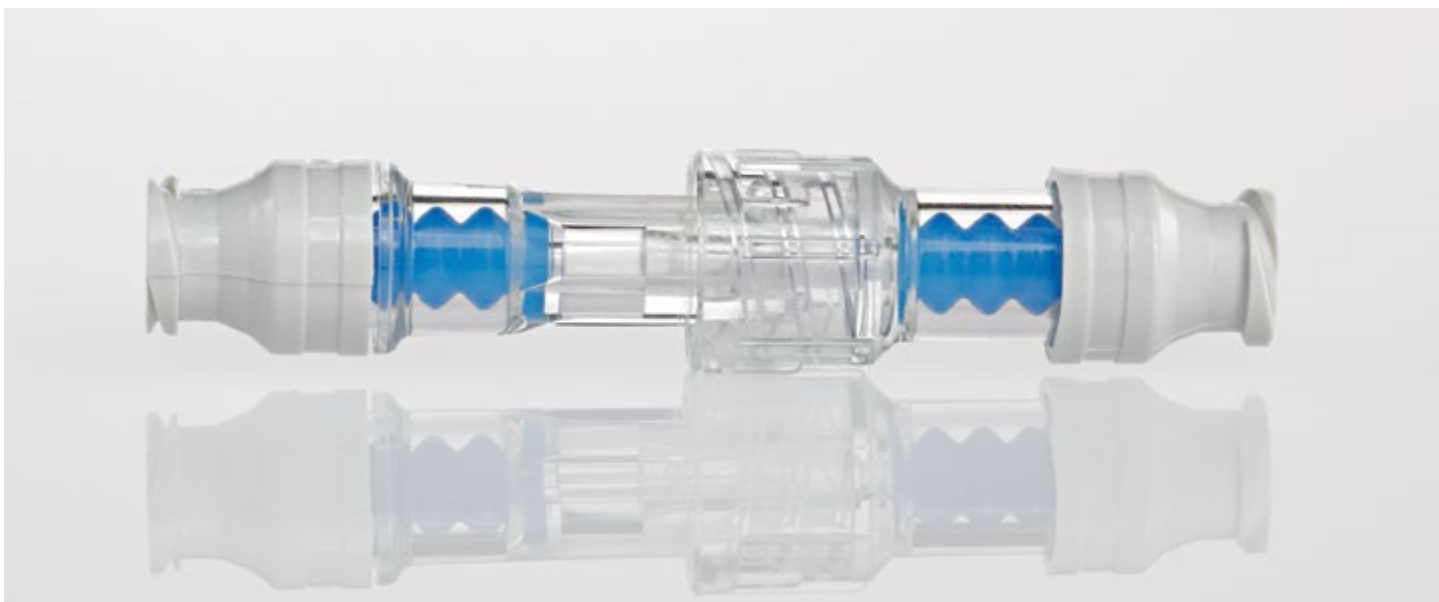| Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
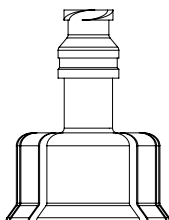
20 mm non-vented vial access device. For drug vials with **neck diameter of Ø20 mm.**

Syringe safety devices

The Texium syringe safety devices utilize mechanical valve technology and help aid in the transfer of hazardous medication. When Texium and SmartSite are paired together, they provide a leak-free, drip-free connection and disconnection. The bonded Texium syringe safety devices provide a preassembled two-in-one solution to help optimize safety, simplify workflow and minimize cost.

Texium syringe safety devices

REF 10012241-0500

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
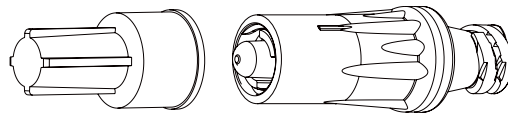
Texium closed male luer with female cap. Transfer device that attaches to a disposable syringe or IV tubing with a standard luer lock connection.

REF MV0450

Packaging	Quantity
Shelf pack	50
Case	100

STERILE EO · LATEX · BPA · PHT
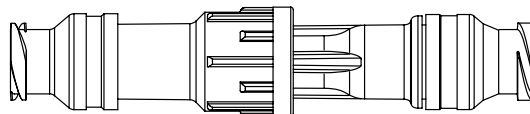
SmartSite syringe-to-syringe transfer device. Comprised of two bonded SmartSite needlefree connectors to aid in the transfer of fluids and medications from one syringe to another syringe.

Texium syringe safety devices

REF MY8003

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT

3 mL needlefree syringe with bonded Texium closed male luer. Bonded components designed to promote the closed safe handling of fluids and medications.

REF MY8005

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
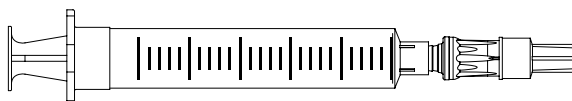
5 mL needlefree syringe with bonded Texium closed male luer. Bonded components designed to promote the closed safe handling of fluids and medications.

REF MY8010

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT

10 mL needlefree syringe with bonded Texium closed male luer. Bonded components designed to promote the closed safe handling of fluids and medications.

Texium syringe safety devices

REF MY8020

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
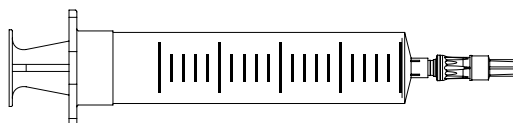
20 mL needlefree syringe with bonded Texium closed male luer. Bonded components designed to promote the closed safe handling of fluids and medications.

REF MY8030

Packaging	Quantity
Shelf pack	N/A
Case	50

STERILE EO · LATEX · BPA · PHT

30 mL needlefree syringe with bonded Texium closed male luer. Bonded components designed to promote the closed safe handling of fluids and medications.

REF MY8060

Packaging	Quantity
Shelf pack	N/A
Case	50

STERILE EO · LATEX · BPA · PHT

60 mL needlefree syringe with bonded Texium closed male luer. Bonded components designed to promote the closed safe handling of fluids and medications.
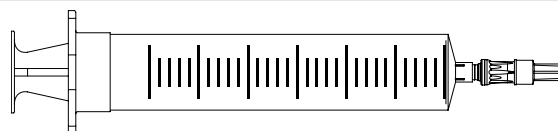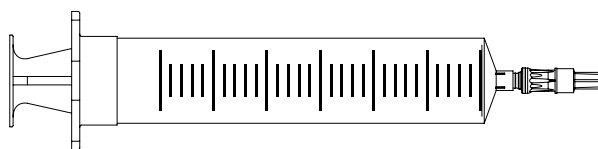
IV bag / line access devices

The Texium IV bag / line access devices ensure closed transfer to infusion bags and closed administration of the drug via the patient's IV line.

Texium IV bag / line access devices

REF 22001E-07

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO | LATEX | BPA | PHT
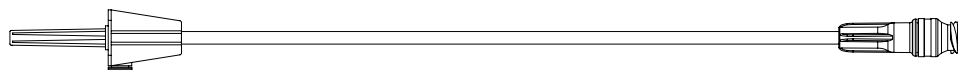
Bag access device, microbore with SmartSite needlefree connector. Connection between IV bag and infusion set.

REF 10013365

Packaging	Quantity
Shelf pack	25
Case	100

STERILE EO | LATEX | BPA | PHT
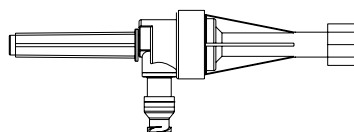
SmartSite add-on bag access device, spike adapter. Connection between IV bag and infusion set. Built-in SmartSite bag access port connector for closed transfer to IV bag.

Texium IV bag / line access devices

REF 2300E-0500

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
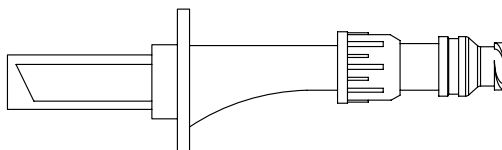
SmartSite bag spike. Connection between IV bag and infusion set. Built-in SmartSite needlefree connector for closed transfer to IV bag.

REF 2309E

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
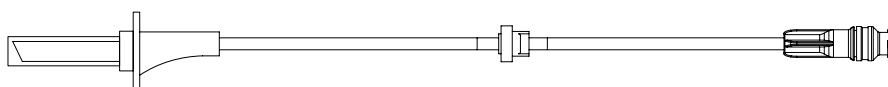
SmartSite bag spike with check valve. Connection between IV bag and infusion set. Built-in SmartSite needlefree connector for closed transfer to IV bag. Check valve allows no backflow of fluid into the IV bag.

REF 2000EA

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
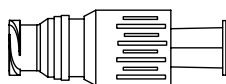
SmartSite needlefree connector. Permits a closed injection and aspiration of fluids without the use of needles. Labeled for use with low-pressure power injectors up to 325 psi and maximum flow rate of 10 mL / second.

System accessories

Texium accessories help aid in the preparation, transport and administration of hazardous drugs.

Texium accessories

REF MV0613

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
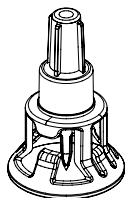
Male luer **13 mm** vial access device. Device used in the transfer of hazardous drugs with a **13 mm** size neck vial directly into an IV bag.

REF MV0620

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
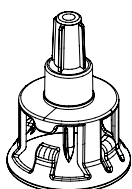
Male luer **20 mm** vial access device. Device used in the transfer of hazardous drugs with a **20 mm** size neck vial directly into an IV bag.

REF MV4000

Packaging	Quantity
Shelf pack	N/A
Case	1

NON STERILE · LATEX · BPA · PHT
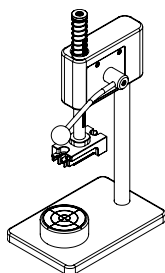
Vial press. Mechanical device used for consistent and simple attachment of Texium vial access devices to a drug vial. Non-sterile.

REF MV2000

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
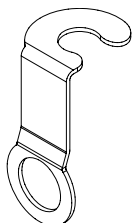
IV bag hinge. Helps to maintain a tight connection between the IV bag spike and IV bag.

IV primary infusion sets

Texium IV pump sets are designed to work with the Alaris pump module 8100 and include many types of tubing. Various configurations can integrate the SmartSite needlefree valve ports above or below the pumping segment.

IV primary infusion sets (bonded Texium)

REF 10013361T

Packaging	Quantity
Shelf pack	N/A
Case	20
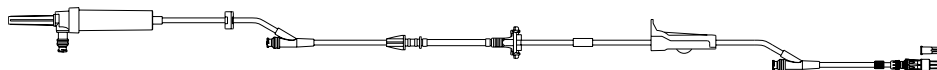
STERILE EO · LATEX · BPA · PHT

Non-vented, needlefree valve bag access port. Check valve, roller clamp(s). Two SmartSite needlefree valves (6 in, 87 in; one above pumping segment and one below) from Texium closed male luer. Fluid path sterile. 20 drop. **L: 118 in L: 298 cm PV: 25 mL**

REF 10321213T

Packaging	Quantity
Shelf pack	N/A
Case	20
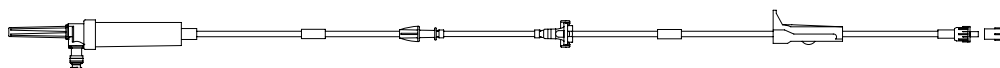
STERILE EO · LATEX · BPA · PHT

Non-vented, needlefree valve bag access port. Roller clamp(s). Texium closed male luer. Fluid path sterile. 20 drop. **L: 107 in L: 272 cm PV: 24 mL**

REF 24601-B007T

Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO · LATEX · BPA · PHT

Needlefree valve bag access port. Low sorbing. Check valve, two roller clamps. Two SmartSite needlefree valves (6 in, 99 in; one above pumping segment and one below) from Texium closed male luer. Fluid path sterile. 20 drop. **L: 118 in L: 300 cm PV: 24 mL**

REF 22600-0007T

Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO · LATEX · BPA · PHT

Low sorbing. Roller, pinch clamp(s). Texium closed male luer. Fluid path sterile. 20 drop. **L: 47 in L: 120 cm PV: 14 mL**

IV primary infusion sets (bonded Texium)

REF 22602-B007T

Packaging	Quantity
Shelf pack	N/A
Case	20
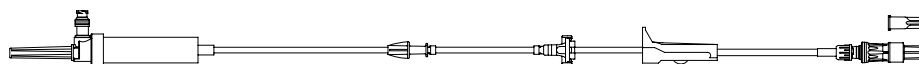
STERILE EO · LATEX · BPA · PHT

Needlefree valve bag access port. Low sorbing. Roller clamp(s). Texium closed male luer. Fluid path sterile. 20 drop. **L: 118 in L: 300 cm PV: 24 mL**

REF 22603-B007T

Packaging	Quantity
Shelf pack	N/A
Case	20

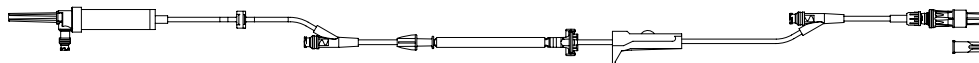STERILE EO · LATEX · BPA · PHT

Non-vented, needlefree valve bag access port. Low sorbing. Roller clamp(s). Texium closed male luer. Fluid path sterile. 20 drop. **L: 47 in L: 120 cm PV: 14 mL**

REF 24602-B007T

Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO · LATEX · BPA · PHT

Needlefree valve bag access port. Low sorbing. Check valve, 0.2-micron filter (1.72 sq in low-protein binding), roller, pinch clamp(s). Two SmartSite needlefree valves (6 in, 88 in; one above pumping segment and one below). Texium closed male luer. Fluid path sterile. 20 drop. **L: 118 in L: 300 cm PV: 27 mL**

REF 24301-0007T

Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO · LATEX · BPA · PHT

Non-vented, needlefree valve bag access port. Low sorbing. 0.2-micron filter (1.72 sq in low-protein binding), roller, pinch clamp(s). One SmartSite needlefree valve (6 in, above bonded Texium closed male luer) from Texium closed male luer. Fluid path sterile. 20 drop. **L: 115 in L: 292 cm PV: 27 mL**

IV primary infusion sets (bonded Texium)

REF 22601-B007T

Packaging	Quantity
Shelf pack	N/A
Case	20
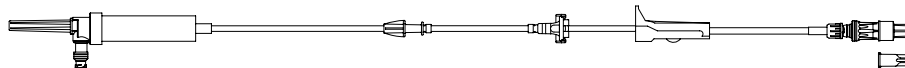
STERILE EO

Needlefree valve bag access port. Low sorbing. Roller clamp(s). Texium closed male luer. Fluid path sterile. 20 drop. **L: 77 in L: 196 cm PV: 19 mL**

REF 22000-B007T

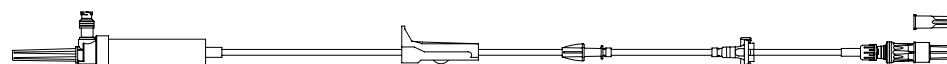| Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO
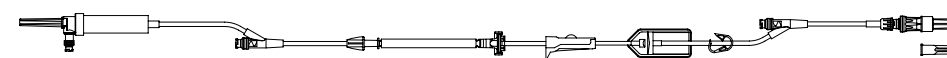
Non-vented, needlefree valve bag access port. Roller clamp(s). Texium closed male luer. Fluid path sterile. 20 drop. **L: 45 in L: 115 cm PV: 14 mL**

REF 24009-0007T

Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO

Check valve, roller clamp(s). Two SmartSite needlefree valves (81 in, 6 in, from Texium closed male luer). Fluid path sterile. 20 drop. **L: 117 in L: 298 cm PV: 25 mL**

REF 24010-0007T

Packaging	Quantity
Shelf pack	N/A
Case	20
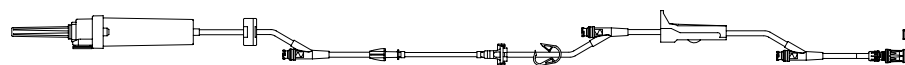
STERILE EO

Check valve, roller, pinch clamp(s). Three SmartSite needlefree valves (96 in, 74 in, 6 in, from Texium closed male luer). Fluid path sterile. 20 drop. **L: 126 in L: 321 cm PV: 26 mL**

IV primary infusion sets (non-bonded Texium)

REF 22604-B007

Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO · LATEX · BPA · PHT
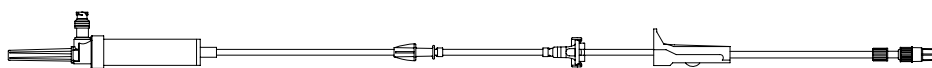
Needlefree valve bag access port. Roller clamp(s), two-piece male luer lock. Fluid path sterile. 20 drop. **L: 118 in L: 299 cm PV: 24 mL**

REF 2465-0007

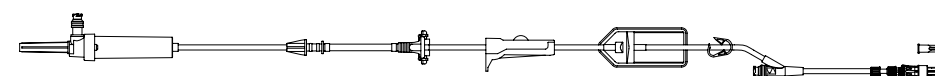| Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO · LATEX · BPA · PHT

Non-vented, needlefree valve bag access port. Low sorbing. 0.2-micron filter (1.72 sq in low-protein binding), roller, pinch clamp(s). One SmartSite needlefree valve (6 in, below pumping segment) from two-piece male luer lock. Fluid path sterile. 20 drop. **L: 116 in L: 294 cm PV: 27 mL**

REF 2466-0007

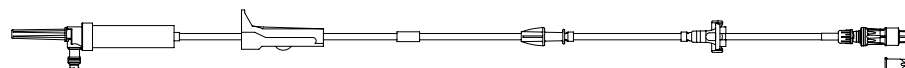| Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO · LATEX · BPA · PHT
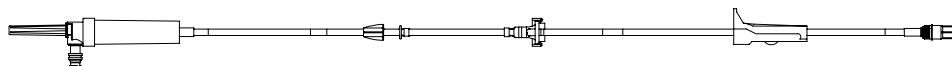
Non-vented, needlefree valve bag access port. Low sorbing. Roller clamp(s), spin male luer lock. Fluid path sterile. 20 drop. **L: 87 in L: 220 cm PV: 21 mL**

REF 10013361

Packaging	Quantity
Shelf pack	N/A
Case	20
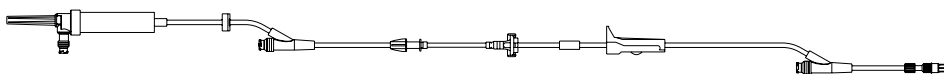
STERILE EO · LATEX · BPA · PHT

Non-vented, needlefree valve bag access port. Check valve, roller clamp(s). Two SmartSite needlefree valves (6 in, 87 in; one above pumping segment and one below) from two-piece male luer lock. Fluid path sterile. 20 drop. **L: 118 in L: 299 cm PV: 25 mL**

REF 10015862

Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO · LATEX · BPA · PHT
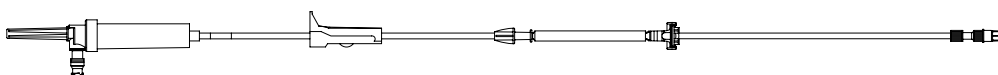
Non-vented, needlefree valve bag access port. Low sorbing. Roller clamp(s). Two-piece male luer lock. Fluid path sterile. 20 drop. **L: 45 in L: 115 cm PV: 14 mL**

IV primary infusion sets (non-bonded Texium)

REF 10321213

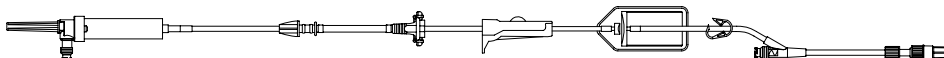| Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO · LATEX · BPA · PHT

Non-vented, needlefree valve bag access port. Roller clamp(s). Fixed male luer lock. Fluid path sterile. 20 drop. **L: 106 in L: 270 cm PV: 24 mL**

REF 10014855A

Packaging	Quantity
Shelf pack	N/A
Case	20
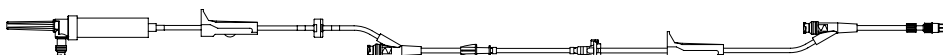
STERILE EO · LATEX · BPA · PHT

Non-vented, needlefree valve bag access port. Low sorbing. Check valve, two roller clamps. Two SmartSite needlefree valves (6 in, 99 in; one above pumping segment and one below) from two-piece male luer lock. Fluid path sterile. 20 drop. **L: 116 in L: 294 cm PV: 24 mL**

REF 10015861A

Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO · LATEX · BPA · PHT
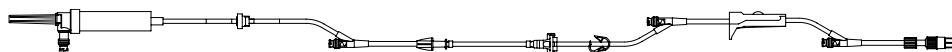
Non-vented, needlefree valve bag access port. Low sorbing. Check valve, roller, pinch clamp(s). Three SmartSite needlefree valves (6 in, 74 in, 96 in; one above pumping segment and two below) from two-piece male luer lock. Fluid path sterile. 20 drop. **L: 127 in L: 323 cm PV: 25 mL**

REF 10061661A

Packaging	Quantity
Shelf pack	N/A
Case	20

STERILE EO · LATEX · BPA · PHT
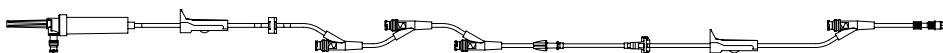
Non-vented, needlefree valve bag access port. Low sorbing. Check valve, two roller clamps. Four SmartSite needlefree valves (6 in, 90 in, 92 in, 94 in; three above pumping segment and one below) from two-piece male luer lock. Fluid path sterile. 20 drop. **L: 127 in L: 308 cm PV: 25 mL**

IV secondary infusion sets

Texium secondary infusion sets encompass a wide portfolio of products designed to work with needlefree valves, including the SmartSite injection ports. Specialized tubing is not made with DEHP as part of the formulation and is available in low sorbing, with filtration and with integrated safety features.

IV secondary infusion sets (bonded Texium)

REF 10013364T

Packaging	Quantity
Shelf pack	N/A
Case	100
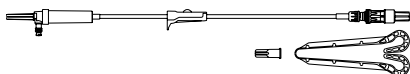
STERILE EO LATEX BPA PHT

Secondary set, non-vented, needlefree valve bag access port. Roller clamp(s). Texium closed male luer with hanger. Fluid path sterile. 20 drop. **L: 32 in L: 81 cm PV: 12 mL**

REF 70001B-07T

Packaging	Quantity
Shelf pack	N/A
Case	100
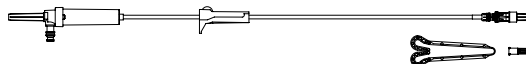
STERILE EO LATEX BPA PHT

Secondary set, needlefree valve bag access port. Low sorbing. Roller clamp(s). Texium closed male luer with hanger. Fluid path sterile. 20 drop. **L: 31 in L: 79 cm PV: 12 mL**

REF 72213NT

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO LATEX BPA PHT
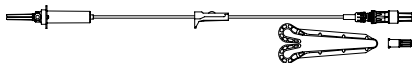
Secondary set, roller clamp(s). Texium closed male luer with hanger. Fluid path sterile. 20 drop. **L: 32 in L: 82 cm PV: 12 mL**

REF 4030B-07T

Packaging	Quantity
Shelf pack	N/A
Case	100
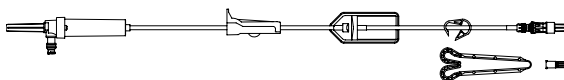
STERILE EO LATEX BPA PHT

Secondary set, needlefree valve bag access port. Low sorbing. 0.2-micron filter (1.72 sq in low-protein binding), roller, pinch clamp(s). Texium closed male luer with hanger. Fluid path sterile. 20 drop. **L: 32 in L: 81 cm PV: 14 mL**

IV secondary infusion sets (non-bonded Texium)

REF 10013364

Packaging	Quantity
Shelf pack	N/A
Case	100
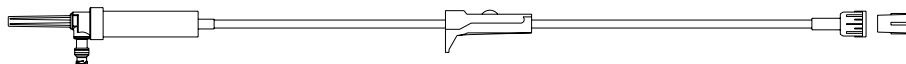
STERILE EO · LATEX · BPA · PHT

Secondary set, non-vented, needlefree valve bag access port. Roller clamp(s). Fixed male luer lock with hanger. Fluid path sterile. 20 drop. **L: 31 in L: 79 cm PV: 7 mL**

REF 10014881

Packaging	Quantity
Shelf pack	N/A
Case	100
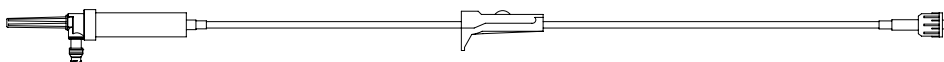
STERILE EO · LATEX · BPA · PHT

Secondary set, non-vented, needlefree valve bag access port. Low sorbing. Roller, pinch clamp(s). Fixed male luer lock with hanger. Fluid path sterile. 20 drop. **L: 31 in L: 79 cm PV: 8 mL**

IV extension infusion sets

Our SmartSite extension sets come with our SmartSite needlefree valve. We offer fluid path extension sets, and extension sets in small bore and standard bore tubing sizes with varying priming volumes depending on the tubing size and length.

IV extension infusion sets (bonded Texium)

REF 20350ET

Packaging	Quantity
Shelf pack	N/A
Case	100

STERILE EO · LATEX · BPA · PHT
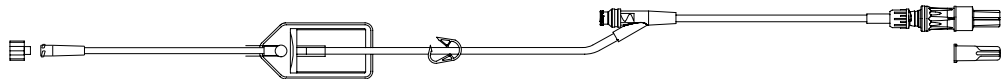
Extension set. Low sorbing. 0.2-micron filter (1.72 sq in low-protein binding), slide clamp(s). One SmartSite needlefree valve (6 in from Texium closed male luer). Fluid path sterile. **L: 20 in L: 51 cm PV: 6 mL**

REF 22005E-07T

Packaging	Quantity
Shelf pack	N/A
Case	50

STERILE EO · LATEX · BPA · PHT

Extension set, microbore, one SmartSite needlefree connector, slide clamp. Fluid path sterile. **L: 62 in L: 158 cm PV: 1.6 mL**

Material specifications and acronyms

This is a reference guide for specifications and acronyms for materials found within the BD PhaSeal and Texium products to help provide health and safety information about our products and their chemical makeup/substances.

BD PhaSeal system material specifications and acronyms

Table 1 includes a reference guide to the abbreviations for materials found within the BD PhaSeal system products as detailed in Tables 2–7.

■ Materials in orange text indicate fluid path components.

■ Materials in blue text indicate components that may contact fluid.

Table 1: Raw materials abbreviations and descriptions	
ABS	Acrylonitrile-butadiene-styrene copolymer
DEHP	Di-(2-ethylhexyl) phthalate
PA	Polyamide
PE	Polyethylene
POM	Polyoxymethylene
PP	Polypropylene
PTFE	Polytetrafluoroethylene
PVC	Polyvinyl chloride
SEBS	Styrene ethylene butylene styrene
TPE	Thermoplastic elastomer

Table 2: Protector materials and cannula size	
Protectors **REF P14, P21, P28, P50, P55**	Not made with DEHP
Expansion film	PA / PP
Hydrophobic filter	PTFE
Filter cover	PP
Membrane	TPE
Housing	PP
Cannula (P14, P21, P50)	Stainless steel
Cannula size:	
P14–1.0 mm OD x 0.7 mm ID	
P21, P50–1.65 mm OD x 1.35 mm ID	
P28, P55– no cannula (PP spike)	
Protective lid	PP

Table 3: Injector materials and cannula size	
Injector luer locks	
REF N35, N35C	Not made with DEHP
Cannula 18G (1.2 mm OD x 0.9 ID)	Stainless steel
Cylinder	ABS
Membrane	TPE
Piston	PP
Cannula housing	PP
Safety sleeve	POM
Piston sealing	Silicone
Cap (N35C, N30C)	PP

Table 4: Connector materials	
Connector luer locks	
REF C35, C45	Not made with DEHP
Housing	PP
Membrane	TPE
Protective cap	PE

Table 5: Infusion adapter materials	
Infusion adapter	
REF C100	Not made with DEHP
Protective cap	PP / PE
Spike housing	PP
Membrane	TPE
Spike port	TPE

Table 6: Y-site materials	
Y-site connector	
REF C80	Not made with DEHP
Connector housing	ABS
Membrane	TPE
Tubing	PVC (not made with DEHP)
Clamp	PP
Y-tubing section	ABS
Male luer end	Acrylic
Cap male luer end	PE
Female luer end	ABS
Cap female luer end	ABS

Table 7: Secondary IV set materials	
Secondary IV sets	
REF C60	Not made with DEHP
All IV protective cap (spikes)	PE
Sets:	
Spike	ABS
Connector	ABS
Membrane	TPE
Tubing	PVC (not made with DEHP)
Drip chamber	PVC (not made with DEHP)
Clamp (not fluid path)	ABS
Male luer end	ABS
Cap male luer end	PE
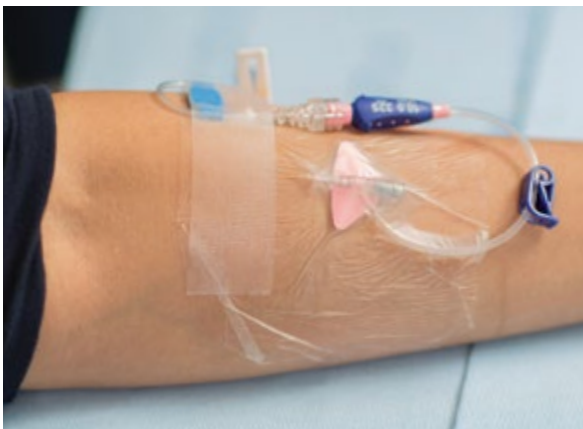
Texium system material specifications and acronyms

Table 1 includes a reference guide to the abbreviations for materials found within Texium system products as detailed in tables 2–11.

■ Materials in orange text indicate fluid path components.

■ Materials in blue text indicate components that may contact fluid.

Table 1: Raw materials abbreviations and descriptions	
ABS	Acrylonitrile-butadiene-styrene copolymer
DEHP	Di-(2-ethylhexyl) phthalate
HDPE	High-density polyethylene
MABS	Methyl methacrylate-acrylonitrile-butadiene-styrene
PC	Polycarbonate
PE	Polyethylene
PP	Polypropylene
PTFE	Polytetrafluoroethylene
PVC	Polyvinyl chloride
TPE	Thermoplastic elastomer

Table 2: Universal vented vial adapter materials	
Universal vented vial adapter	
REF MV0400	Not made with DEHP Approximate flow rate: > 3,000 mL per hour Residual fluid: < 1.2 mL Priming volume: < 0.15 mL
Vial access device body	MABS
Air filter	
Housing	HDPE
Filter	Acrylic copolymer / nylon
SmartSite needlefree valve	
Body	Acrylic
Female luer	Polyurethane
Piston	Silicone
Adhesive	UV-activated acrylic

Table 3: SmartSite vented vial adapter materials	
REF MV0413, MV0420, MV0428	Not made with DEHP Total length = 2.3 in, PV = 0.08 mL (MV0413) Total length = 2.3 in, PV = 0.1 mL (MV0420, MV0428)
Vial access device body	MABS
Air filter	
Housing	MABS (MV0420 / MV0428) HDPE (MV0413)
Filter	Acrylic copolymer / nylon
SmartSite needlefree valve	
Body	Acrylic
Female luer	Polyurethane
Piston	Silicone
Adhesive	UV-activated acrylic

Table 4: SmartSite non-vented vial adapter materials	
REF 2203E, 2205E	Not made with DEHP (2203E, 2205E) PV = 0.08 mL (2203E) PV = 0.09 mL (2205E)
Vial access device body	PC
SmartSite needlefree valve	
Female luer	Polyurethane
Piston	Silicone

Table 5: SmartSite VialShield closed vial adapter materials	
REF MV0513, MV0520, MV0528	Not made with DEHP
Shroud housing	PC
Upper housing	PC
Check valve	Silicone
Air filter (not shown—in upper housing)	PTFE / nylon
Chamber membrane	Polyurethane
SmartSite needlefree valve	
Body	Acrylic
Female luer	Polyurethane
Piston	Silicone
Adhesive	UV-activated acrylic

Table 6: Texium closed male luer materials	
REF 10012241	Not made with DEHP PV = 0.12 mL
Body	PC
Actuator	PP and TPE
Piston	Silicone
Cap	PE

Table 7: Texium bonded syringe materials	
REF MY8003, MY8005, MY8010, MY8020, MY8030, MY8060	Not made with DEHP
Syringe (body and plunger)	PP
Syringe stopper	Latex-free elastomer
Syringe lubricant	Silicone
Adhesive	Cyanoacrylate
Texium	
Body	PC
Actuator	PP and TPE
Piston	Silicone
Cap	PE

Table 8: SmartSite bag access device materials

REF 2300E	Not made with DEHP Total length = 3.5 in PV = 0.51 mL
Cap	PE
Body	Acrylic
SmartSite needlefree valve	
Body	Acrylic
Female luer	Polyurethane
Piston	Silicone
Solvent	Cyclohexanone

Table 9: SmartSite add-on bag access device materials

REF 10013365	Not made with DEHP Total length = 4.0 in PV = 0.60 mL
Spike	PE
Port cap	ABS
Spike / body	ABS
Spike port	PVC
SmartSite needlefree valve	
Body	PC
Female luer	Polyurethane
Piston	Silicone
Solvent	Cyclohexanone

Table 10: SmartSite needlefree valve materials

REF 2000E, 2000EA	Not made with DEHP PV = 0.11 mL labeled for use with low-pressure power injectors up to 325 psi and maximum flow rate of 10 mL / second
Body	Acrylic
Female luer	Polyurethane
Piston	Silicone
Cap	PE

Table 11: IV administration set with bonded Texium materials	
IV administration set with bonded Texium	
REF 10013364T	Not made with DEHP 20 drop Fluid path sterile Total length = 32 in PV = 12 mL
Spike	ABS
SmartSite needlefree valve	
Body	PC
Female luer	Polyurethane
Piston	Silicone
Drip chamber	PVC
Tubing	PVC
Male connector	ABS
Texium	
Body	PC
Actuator	PP and TPE
Piston	Silicone
Cap	PE
Adhesive	Cyanoacrylate

Key terms, abbreviations and symbols

This is a reference guide for key medical terms, abbreviations and symbols that are used to describe materials found within the BD PhaSeal and Texium products.

Key terms, abbreviations and symbols

0.2-micron filter
Removes particulate matter larger than 0.2 microns and virtually all fungi and bacteria. Often used as a final filter for air elimination.
Note: Filters are self-priming. DO NOT INVERT FILTER. Filters contain Supor® (polyethersulfone) membranes, which have low-protein and drug-binding characteristics.

Two-piece male luer lock
Male luer lock with retractable rotating collar.

20 drop
Spike is designed so that 20 drops equal approximately 1 mL.

Bag access
SmartSite port integrated into the drip chamber spike, which allows direct fluid path access into a spiked container.

Check valve
A device that allows flow in only one direction. Commonly used for secondary piggyback drug administration or to protect certain elements of the set from high pressures that can occur when a syringe injects into the set. Reduces risk of contaminants flowing toward solution bag.

Content sterile
The entire content of the package is sterile, and is tested / validated and labeled for placing directly on a sterile field.

DEHP Di-(2-ethylhexyl) phthalate
A plasticizer used in PVC tubing to make it soft and pliable.
Note: All sets contain DEHP unless otherwise noted.

Fixed male luer lock
Male luer and collar are one piece. Collar does not spin or move freely.

Fluid path sterile
Although the entire administration set is sterilized, only the capped, fluid path portion of the administration set was tested to meet sterility requirements.

Low sorbing
PVC-free and not made with DEHP tubing in the fluid path (polyethylene-lined). Designed to minimize absorption of drugs into the matrix of tubing materials and prevent leaching (has inert internal surface).

Microbore / ultra-minibore
Tubing with smaller internal diameter of ≤ 0.04 in, to minimize the contained volume.

Needlefree / needleless
Needlefree connectors or valves, also known as needleless connectors or valves. Offer a safe way to access IV lines without the use of a needle, which greatly reduces the risk of accidental needlestick injuries.

Non-vented
Characteristic of the spike that enters the solution container. Designed for collapsible plastic containers, as no air is required to enter the container for fluid to flow.

Not made with DEHP
Set / component is not made with DEHP.

Not made with natural rubber
Latex is known to cause hypersensitivity reactions in significant percentages of patients and healthcare workers.

Spin male luer lock
Male luer lock with rotating collar.

Standard bore
Tubing with larger diameter of ≥ 0.1 in.
Note: All sets with tubing are standard bore unless otherwise noted.

Vented / non-vented
Characteristic of the spike that enters the solution container. Designed for containers that do not collapse when emptying (glass or semi-rigid plastic). Vent allows air to enter the container to allow fluid to flow.
Note: All sets with drip chambers are vented / non-vented unless otherwise noted.

Abbreviations	
ABS	Acrylonitrile-butadiene-styrene copolymer
DEHP	Di-(2-ethylhexyl) phthalate
HDPE	High-density polyethylene
MABS	Methyl methacrylate-acrylonitrile-butadiene-styrene
PA	Polyamide
PC	Polycarbonate
PE	Polyethylene
POM	Polyoxymethylene
PP	Polypropylene
PTFE	Polytetrafluoroethylene
PVC	Polyvinyl chloride
SEBS	Styrene ethylene butylene styrene
TPE	Thermoplastic elastomer

Key of symbols	
STERILE EO	Sterilized using
NON STERILE	Non-sterile
(symbol)	Do not reuse
LATEX	Latex-free
BPA	BPA-free
PHT	DEHP-free

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