BD PhaSeal™ is a closed-system drug transfer device that mechanically prohibits the transfer of environmental contaminants into the system and the escape of hazardous drug aerosols or vapours into the environment.

**BD PhaSeal™ – Clinically Proven**

- **Prevents the escape of hazardous aerosols and vapours.** An airtight pressure equalization chamber contains drug aerosols and vapours within the system.

- **Prevents leakage throughout the entire drug transfer process.** BD PhaSeal™ is designed with dry, leakproof connections, preventing exposure when connecting and disconnecting from vials, syringes, IV bags, and IV lines.

- **The effectiveness of BD PhaSeal™ has been studied and validated by numerous independent, published studies.** Scientific evidence gives BD PhaSeal™ users data they can trust.

- **Universally compatible, easy to use system.** The simple and easily performed push-turn-push motion provides confidence when transferring hazardous drugs.

**Adopt BD PhaSeal™ in your clinic and receive a FREE Assembly Fixture ($400 value)**
Primary components: the Injector, the Connector, and the Protector

1. Injector: syringe safety device
   The Injector Luer Lock attaches to a standard syringe or IV line for a dry, leakproof connection during drug preparation and administration. It ensures a closed drug transfer by means of tightly sealed, double elastomeric membranes.

2. Connector: access port
   The Connector is the access port for closed administration of hazardous drugs during injections and infusions. It attaches to standard Luer Lock ports and seals these due to the unique membrane design.

3. Protector: drug vial access device
   The Protector is a pressure equalization device that is permanently attached to the vial and is used in the preparation of either powder or liquid drugs. It provides airtight safety due to the sealed expansion chamber and dry leakproof connections.

4. IV Component: Y-Site Connector

5. Syringe Preparation Component: Assembly Fixture

#515100 Protector P14 $375.00 per box of 50 #515003 Injector Luer Lock N35 $324.00 per box of 50
#515102 Protector P21 $377.50 per box of 50 #515200 Connector Luer Lock C35 $90.00 per box of 50
#515104 Protector P28 $187.50 per box of 25 #515304 Y-Site Connector C80 $108.00 per box of 30
#515105 Protector P50 $187.50 per box of 25 #515400 Assembly Fixture M12 $400.00 each
PhaSeal has been protecting veterinarians and staff around the globe for years. The safety it provides is well proven and documented. Whether you work at a big veterinary hospital in the city, a university hospital or a remote, rural clinic, you can rely on PhaSeal. Quite simply, you know you’re safe.

Supporting veterinary clinics like yours

PhaSeal allows us to run a more gentle clinic – and this means a lot to us.”

Angela E. Frimberger, VMD, DACVIM (Oncology), and Antony S. Moore, BVSc, MVSc, DACVIM (Oncology) Veterinary Oncology Consultants, Wauchope, Australia

Today we use PhaSeal in all situations when handling cytotoxic drugs.”

Drs. Johan P. de Vos, Veterinary Oncology Referral Centre “De Ottenhorst”, Terneuzen, The Netherlands

Now we can concentrate on our main passion – taking care of our patients.”

Bert Jan Reezigt, DVM, Specialist in small animal diseases, Blå Stjärnans Veterinary Hospital, Göteborg, Sweden

The value of PhaSeal.

Experience. Carmel Pharma is the manufacturer of the PhaSeal system, today’s only clinically proven closed-system drug transfer device (CSTD) for the handling of hazardous drugs. Carmel Pharma has more than 15 years of experience focused solely on the development of CSTDs.

Confidence. Since the start in Sweden in 1994, many millions of doses of hazardous drugs have been given with PhaSeal protecting health care workers from dangerous exposure to the drugs.

Quality. The PhaSeal system is backed by more than 15 independent, peer-reviewed, published articles. Its unique airtight expansion chamber and dry, leakproof connections make it the only device that meets the NIOSH and ISOPP definitions of a CSTD.

Consult instructions for use.

Regions:

Global Headquarters:
Carmel Pharma AB
Aminogatan 30
SE-431 53 Mölndal
Sweden
Tel: +46 31 703 04 00
Fax: +46 31 703 04 04
E-mail: info@carmelpharma.com
Web: www.carmelpharma.com

CANADA
Carmel Pharma Canada, Inc.
8295 Don Mills Road
Suite 5
Oakville, Ontario L6J 1N6
Canada
Tel: +1 905-842-1115
Fax: +1 905-842-1116
E-mail: info@canadaphaseal.com
Web: www.canadaphaseal.com

UNITED STATES
Carmel Pharma USA
7029 Huntley Road, Suite O
Columbus, OH 43229
U.S.A.
Tel: +1 614 841 0504
Fax: +1 614 841 0525
E-mail: info@carmelpharmausa.com
Web: www.carmelpharmausa.com

FINLAND
Carmel Pharma Oy
P.O.Box 62
04201 Kerava
Finland
Tel: +358 45 2796 911
Fax: +358 9 2946 326
E-mail: info@carmelpharma.com
Web: www.carmelpharma.com

FRANCE
Carmel Pharma SARL
15 rue Taitbout
75009 Paris
France
Tel: +33 1 72 71 25 48
Fax: +33 1 72 71 25 99
E-mail: info@carmelpharma.com
Web: www.carmelpharma.fr

GERMANY
Carmel Pharma GmbH
Rödelheimer Bahnweg 31
DE-60489 Frankfurt am Main
Germany
Tel: +49 69 58 700 750
Fax: +49 69 58 700 759
E-mail: info@carmelpharma.de
Web: www.carmelpharma.de

ISRAEL
Carmel Pharma, Inc.
Carmel Business Park, Route 5
Israel
Tel: +972 3 542 0600
Fax: +972 3 542 0601
E-mail: info@carmelpharma.com
Web: www.israelcarmelpharma.com

JAPAN
Carmel Pharma Japan K.K
Ochanomizu Tenjin Bldg
Yushima 3-2-12, Bunkyo-ku
113-0034 Tokyo
Japan
Tel: +81 3-5846-5826
Fax: +81 3-5846-5828
E-mail: infojapan@carmelpharma.com
Web: www.phaseal.co.jp

INDIA
Carmel Pharma, India
P.O.Box 5465
120002 New Delhi
India
Tel: +91 11 5354 5420
Fax: +91 11 5354 5421
E-mail: info@indiancarmelpharma.com
Web: www.indiancarmelpharma.com

INTERNATIONAL
Carmel Pharma AB
Aminogatan 30
SE-431 53 Mölndal
Sweden
Tel: +46 31 703 04 00
Fax: +46 31 703 04 04
E-mail: info@carmelpharma.com
Web: www.carmelpharma.com

Distributors markets:

NORDIC COUNTRIES
Carmel Pharma AB
Aminogatan 30
SE-431 53 Mölndal
Sweden
Tel: +46 31 703 04 00
Fax: +46 31 703 04 04
E-mail: info@carmelpharma.com
Web: www.carmelpharma.com

U.S.A.
Carmel Pharma, Inc.
7029 Huntley Road, Suite O
Columbus, OH 43229
U.S.A.
Tel: +1 614 841 0504
Fax: +1 614 841 0525
E-mail: info@carmelpharmausa.com
Web: www.carmelpharmausa.com

For more information about what PhaSeal can mean for your veterinary clinic, visit www.veterinary.phaseal.com or contact Carmel Pharma at infovet@carmelpharma.com

PhaSeal has been protecting veterinarians and staff around the globe for years. The safety it provides is well proven and documented. Whether you work at a big veterinary hospital in the city, a university hospital or a remote, rural clinic, you can rely on PhaSeal. Quite simply, you know you’re safe.
Companion animals deserve the best care possible. Sometimes this involves hazardous drugs. In such cases, you and your staff deserve the best protection possible. As you know, even limited or infrequent exposure may pose a potential health risk. With PhaSeal®, the only clinically proven closed-system drug transfer device, you know that you’re safe.

With PhaSeal®, you know you’re safe

Care with confidence. Perhaps your veterinary clinic currently specializes in oncology. Or maybe you are thinking about introducing cytotoxic drug treatments in your clinic, but are hesitant due to occupational safety concerns or the infrequency of this type of treatment. Whatever the case, you and your staff can rely on PhaSeal for advanced protection and peace of mind throughout the handling process. Quite simply, the more you and your staff know about PhaSeal, the more secure and confident you will be.

The ease of it all. PhaSeal is an easy to learn and easy to use system. After a short training focusing on a few simple steps, you will feel comfortable, confident and safe. All in all, PhaSeal makes it easy to live up to safety guidelines and your obligations to your staff – so that you can focus on providing the best possible veterinary care.

Designed for you – every step of the way

Your work is full of challenges. Why should the preparation, administration and disposal of hazardous drugs be one of them? PhaSeal is safe, reliable and easy to use – every step of the way.

**Preparation.** With PhaSeal’s unique dry, leakproof connections and sealed pressure equalization chamber, preparation can be done without any risk of drug interaction with the environment.

**Administration.** Closed administration of drugs can be done with PhaSeal whether it is for injection or infusion.

**Waste Disposal.** With the PhaSeal system, waste handling of hazardous drugs could not be easier. It is closed all the way so that drug residuals are not released into the surrounding environment.

The system is based on three primary components: Protector™, Injector™ and Connector™. They come in a range of sizes to meet the specific requirements and preferences of your veterinary clinic.

**Dry, leakproof connections.** PhaSeal is designed with dry, leakproof connections – preventing exposure when connecting and disconnecting from vials, syringes, IV bags and animal IV lines.

**Airtight chamber.** The sealed airtight chamber of the Protector captures aerosols and vapors while maintaining equal pressure in the vial during drug preparation. You can see that you are protected!

**Unique design.** The Injector ensures sealed drug transfer and “locks” into safe mode when the procedure is complete to prevent any risk of exposure. Its unique design allows you to retrieve all the drug from the vial.

A closer look at a straightforward concept
The Protector is a pressure equalization device, permanently attached to the vial used in the preparation of drugs from either powder or liquid form. The Protector provides closed pressure equalization through the sealed expansion chamber and dry connections via the double membrane technique. This ensures that there is neither overpressure nor vacuum when air or fluid is injected into or aspirated from the vial.

**Protector**

The Protector is a pressure equalization device, permanently attached to the vial used in the preparation of drugs from either powder or liquid form. The Protector provides closed pressure equalization through the sealed expansion chamber and dry connections via the double membrane technique. This ensures that there is neither overpressure nor vacuum when air or fluid is injected into or aspirated from the vial.

**Physical characteristics**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Protector (P14)</th>
<th>Protector (P21)</th>
<th>Protector (P28)</th>
<th>Protector (P50)</th>
</tr>
</thead>
<tbody>
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<td>515100</td>
<td>515102</td>
<td>515104</td>
<td>515105</td>
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<td>Ø60 mm</td>
<td>Ø50 mm</td>
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<td>20 mL</td>
<td>60 mL</td>
<td>50 mL</td>
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<tr>
<td>Color protective cap</td>
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<tr>
<td>Packaging: Transport box</td>
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<td>100 pcs</td>
</tr>
</tbody>
</table>

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Consult instructions for use. MSS0043 3/12.