



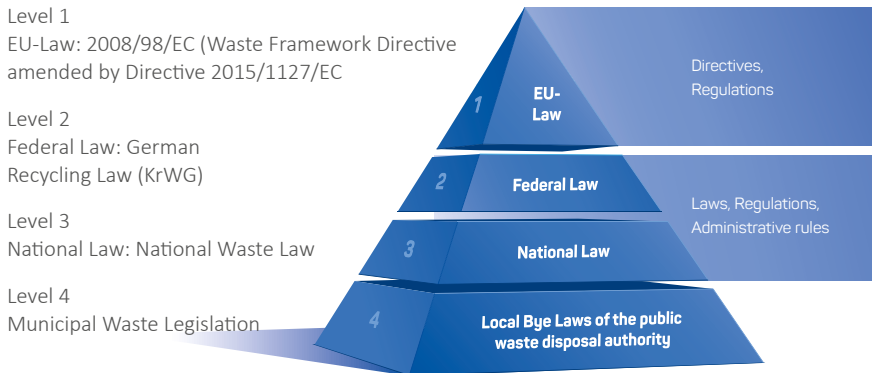
SEALSAFE® – WASTE SEALING SYSTEM
Toxic and infectious waste – safely disposed!

berner

LEGAL BASES

When handling infectious and toxic waste in the laboratory, various legal aspects must be considered. Legal requirements of Occupational Health and Safety Act (ArbSchG), German Ordinance on Biological Working Agents (BioStoffV) and/or Law on Chemicals (ChemG) as well as the German Hazardous Substances Ordinance (GefStoffV) must be observed as soon as the waste is produced. The protection of the employees is always top priority. For the waste produced, there is a multi-level legal framework given within the EU. The hierarchical structure complements EU law with additional aspects of the German recycling law, the respective national waste law and the municipal waste legislation.

WASTE MANAGEMENT HIERARCHY



According to the German recycling law (KrWG), waste has to be categorized since 2002 using an European waste code. With these 6-digit waste codes, listed in the "Ordinance on the European list of waste (AVV)", the waste is classified according to the substances and the hazardousness. Waste codes which are additionally marked with an "*" are considered hazardous within the meaning of § 48 of the German recycling law.

Table on the right: Excerpt from AVV.

Depending on the laboratory and the waste code, hazardous waste must either be collected in specific single-use containers and sent to municipal waste incineration, or inactivated and incinerated in the range of the high-security laboratory on site.



Excerpt from AVV: wastes from natal care, diagnosis, treatment or prevention of diseases in humans

Current waste code	Description	Original code
18.01.01	sharps (except 18.01.03*)	B
18.01.02	body parts and organs including blood bags and blood preserves (except 18.01.03)	E
18.01.03*	wastes whose collection and disposal is subject to special requirements in order to prevent infection	C
18.01.04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)	B
18.01.06*	chemicals consisting of or containing dangerous substances	D
18.01.07	chemicals other than those mentioned in 18.01.06*	D
18.01.08*	cytotoxic and cytostatic medicines	D
18.01.09	medicines other than those mentioned in 18.01.08*	D
18.01.10	amalgam waste from dental care	D

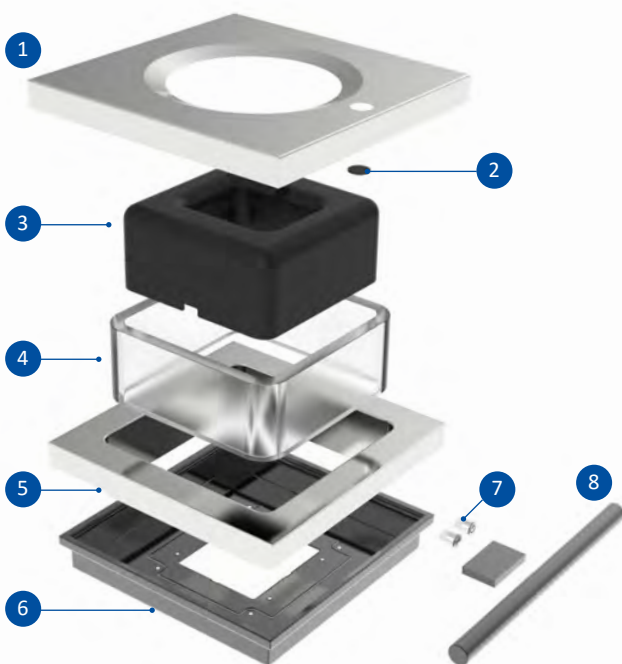
*Hazardous waste

SEALSAFE® PRO STATE OF THE ART

SAFE SEALING OF INFECTIOUS AND TOXIC WASTE

SealSafe® - waste sealing units by Berner International have been used successfully in many laboratories for decades. The principle is based on the fact that toxic or infectious waste can be directly sealed aerosol-tight in a special tubular foil with a high protective barrier. The SealSafe® pro triggers the foil transport and the sealing process in a contact-free manner via sensor. This means that problematic laboratory waste is safely preconditioned and stored temporarily.

SealSafe® pro presents the latest revision and improvement of our older device generation. Design and technology were completely revised to the state-of-the-art. As a mobile “stand-alone” version, the original SealSafe® pro is designed as an open device shape, so it can be used with many different container types, with the waste filling level easily visible.



- 1 Housing lid (stainless steel)
- 2 Sensor
- 3 Casing (plastics)
- 4 Sealing foil tube
- 5 Cover (stainless steel)
- 6 Base plate (powder-coated)
- 7 Keys for on/off and seal and cut function
- 8 Handle bar





New Design

Appearance and functionality have been adapted to the modern design of our laboratory devices.



LED-Technology

Used to display the operating status or possible errors. The foil area is illuminated in different colors:

- yellow = ready for operation
- green = normal sealing cycle
- blue = seal and cut function
- red = error



New IR Sensor

It exclusively serves for contactless release/triggering of the sealing process for waste disposal. This critical step thus proceeds without the risk of contamination.



Seal and cut function

A separate switch is available for triggering the seal and cut function. The foil is automatically cut through, a new foil bag is produced and the separated tubular foil is being transported into the container.



Separate on/off switch

On/Off switch on the device housing – also for interrupting unwanted sealing processes.



Enhanced control

Offers advanced functions and ensures easy handling and operation.



Optional battery and mains operation

Mobile operation via stable accumulator for approx. 30 sealing processes or permanent mains operation with simultaneous charging function of the battery is possible.

ENHANCED FUNCTIONS

SEALSAFE® PRO OPTION CLOSED DESIGN

The mobile waste sealing unit SealSafe® pro is optional available as a closed version. In this version, the collection container is completely covered by a high-quality, powder-coated Zincor steel housing. For removal, the interior is accessible through a door. The design completely prevents the possibility of tipping over. At the same time, visual protection is given for some types of waste which are aesthetically unpleasant. This may be advantageous in facilities such as hospitals or nursing homes which are open to the public.



Housing lid of stainless steel



No tipping over



Visual protection



Suitable for hospitals

SEALSAFE® PRO OPTION FOOTSWITCH FUNCTION

The functionality of the SealSafe® pro is enhanced by an optional footswitch function. This ensures that any contact of the user with the hands on the surface of the device is avoided – thus the risk of contamination is minimized.



Footswitch function



Contact-free operation



ALL AROUND GOOD

Corresponding to the design language of the Claire Model family the SealSafe blends perfectly into your lab or cleanroom.



MORE PROVEN FEATURES OF SEALS SAFE® WASTE SEALING UNITS

- Touchless sealing with sensor technology
- Aerosol-tight sealing of waste, prevents release of contaminants
- Individual foil lengths are adjustable
- Large opening
- Stainless steel framing of the opening for best cleaning possibilities
- Made in Germany
- Reduces odor nuisance
- Increases occupational safety
Secure handling of waste from CMR-substances or biological materials
- Practice oriented
excellent for use in pharmacies, in the pharmaceutical sector and laboratories
- Optimal supplement when working in safety cabinets
- Type tested and certified

Safe and reliable

TUBULAR FOIL WITH DEPENDABLE BARRIER PROPERTIES

All devices use the same special tubular foil with high protective barrier against CMR drugs, chemicals and infectious substances (e.g. > 7-day permeation time for the cytostatic carmustine)



CONSUMABLES

WASTE TRANSFER AEROSOL-TIGHT

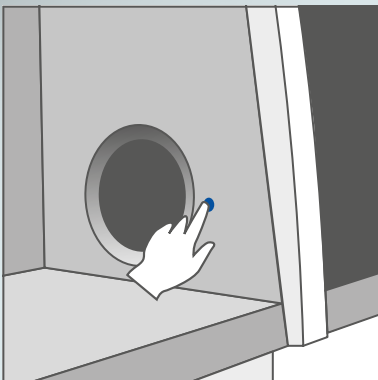


CLAIRE® PRO & SEALSAFE® PLUS THE PERFECT SYMBIOSIS FOR SAFE WASTE MANAGEMENT

Dangerous chemical and biological waste from safety cabinets deserve special attention. The ability to transfer waste **without** leaving the safe workspace of the safety cabinet is the key to minimising cross-contamination.

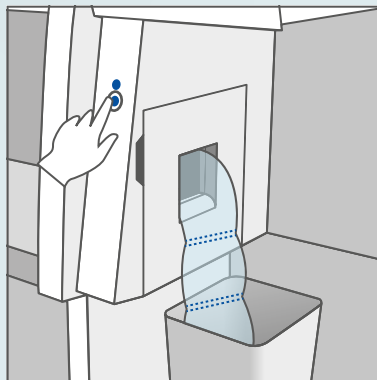
The, for the Claire® specially adapted, waste disposal unit SealSafe® Plus has been designed for receiving and air-tight sealing of waste.

Automatic transport of foil tube sealing after sealing process. Electrically operated sliding pane closes the waste chute safely.



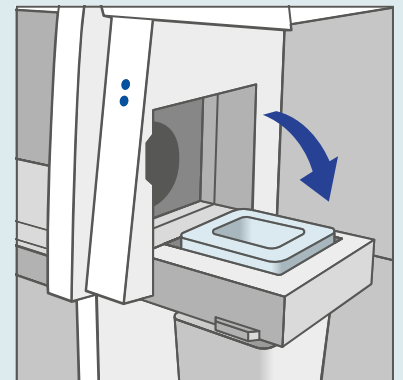
Contactless operation

Using sensor technology, LED illumination function of the deposit chute, lateral deposit chute is easily accessible. Deposit chute on left or right.



Cut and seal facility

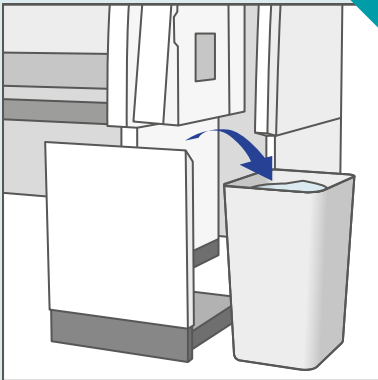
No cross-contamination protection and spill risk. Minimises release of aerosols and cross-contamination. Waste disposal in sterile and safe environment.



Easy change of foil tube

Individual waste bag sizes possible. 3-layer polyethylene foil tube with high barrier properties (e.g. for cytostatics > 7 days).

Extension provides additional storage space
for foil tubes, single-use material, PPE etc



USAGE



Convenient pull-out
waste container

Safe Waste Management

Safe transfer and storage, up to
inactivation in the aerosol-tight foil tube.
No dangerous waste in any work areas.

CONSTRUCTION AND INSTALLATION OF SEALSAFE®

→ Premium Quality

The SealSafe® pro has a first-class & solid finish. The area around the opening for waste disposal is made entirely of stainless steel and is therefore durable, resistant and easy to clean. The frame and the socket for the waste container are made from steel section tube and sheet metal and coated with high-quality epoxy-powder in white and black (RAL 9003 und 9005, silk). All components and options are implemented by our qualified employees in the design and production department with the highest quality standards.

→ Installation and Use

Installation and operation are very straight forward. The device can be directly used after connection to the power supply and insertion of the tubular foil. For mobile operation with the integrated battery a charging time of approx. 24 h is required. With the ergonomic handle bar and the castors the mobile use is conceivably comfortable.

Products from Berner International meet the highest quality requirements and undergo a comprehensive test program before being delivered to the customer. From product development through production to commissioning in your laboratory and beyond- quality "Made in Germany".

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SealSafe® plus
for e.g. Claire® pro



SealSafe® pro
closed



SealSafe® pro
open

TECHNICAL INFORMATION FOR SEAL SAFE®

Technical data: SealSafe® plus

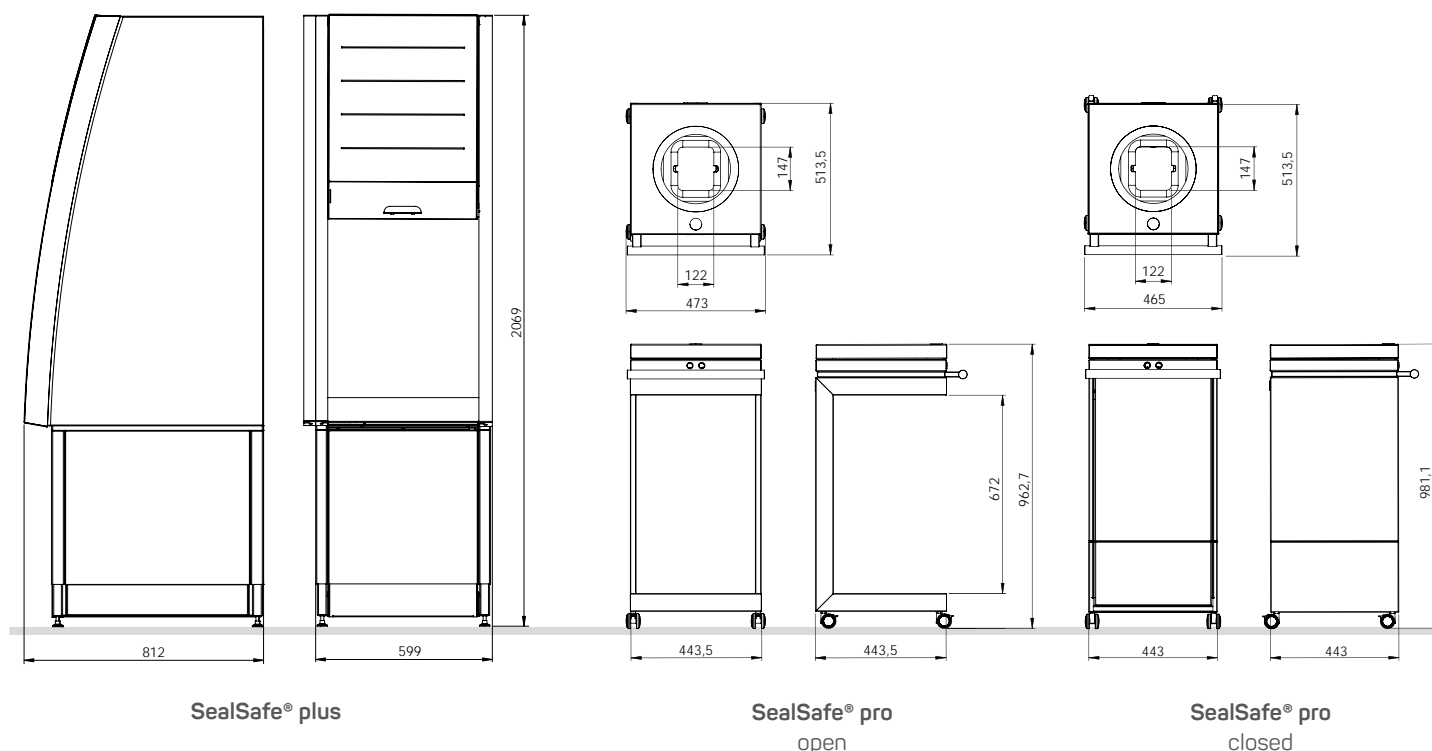
Item number	200029/200147 (right or left)
Construction	closed, attached to safety cabinet
Design	DIN EN 61010-1
Production	DIN EN ISO 9001:2008
Casing material	Stainless steel V2A & powder coated Zincor steel sheet RAL 9002/9005
Rated voltage	230V / 50 Hz
Rated power	130 VA
Protection class	I / IP20
Dimension in mm	599/812/2000 – 2069 (B/T/H)
Bag length	Automatic
Section	Button
Initiation of sealing process	Sensor
Weight	Approx. 120 kg

Technical data: SealSafe® pro

Item number	200702/200704
Construction	open/closed
Design	DIN EN 61010-1
Production	DIN EN ISO 9001:2008
Casing material	Stainless steel V2A & powder coated Zincor steel sheet RAL 9002/9005
Rated voltage	230V / 50 Hz
Rated power	130 VA
Protection class	I / IP20
Dimension in mm	476/541/865 – 1085 (B/T/H)
Bag length	Automatic
Section	Button
Initiation of sealing process	Sensor
Weight	Approx. 28 / 31 kg

Consumables – tubular foil

Material	Long foil tubing made of polyethylene
Thickness	Approx. 27 µm
Width	Approx. 570 mm
Length	Approx. 32 m per tubular foil
Sterile version	Item number: 1001 (PU = 3 pieces)
Non-sterile version	Item number: 1000 (PU = 5 pieces)





SealSafe-V1-EN-2018/03

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