

SV GUIDELINES

Solid Biological Waste

1. General Information

1.1. Preliminary remarks

- This procedure is valid for BSL1 (biosafety level 1 or P1) and BSL2 (P2) **biological solid waste**.
- For elimination of **Liquid biological waste**, refer to the document BIO_BSR_MB_Liquid_Biological_waste_[E]_1.0.docx.
- Information on surface decontamination procedures can be found in the document BIO_BSR_MB_Surface decontamination_[E]_1.0.docx
- A more complete procedure for the elimination of BSL3 (P3) biological waste is described in the document "BIO_BSF_P3_Guideline_[E]_1.0.pdf.
- Animal carcasses or animal products are eliminated through a separate channel. Please refer to CAV rules and guidelines for more information and to the document BIO_BSR_MBP_Waste_Carcasses_[E]_1.0.pdf

1.2. Responsibility

- Each research unit, core facility or service is responsible for the proper sorting out of their biological waste.
- Only the bags or containers that have been prepared according to the procedure described below will be accepted for disposal.

1.3. Basic rules

- **Always** separate liquid waste from solid waste.
- Use adapted and validated containers for special waste (see tables)
- When contaminated with toxic chemicals, waste must be eliminated as chemical waste.

Tables for the collection and treatment of biological waste




Table 1	State	Containment Packaging	Treatment	Elimination	Remarks
Risk group 1 organisms Not genetically modified	Solid waste	 White bags with red stripes	No specific inactivation	Elimination by the cleaners	
	Semi-solid ¹	 Plastic-coated cardboard box ²	No specific inactivation ³	Elimination by the cleaners	¹ For example, agarose plates or agarose tubes ² Code843 in SV store ³ Material is transported to Tridel for incineration
	Sharps, broken glass, needles	 Sharp containers	No specific inactivation	Elimination by the users as special waste ⁴	⁴ OMOD Code : 15 01 10








Table 2	State	Containment Packaging	Treatment	Elimination	Remarks
Risk group 1 organisms Genetically modified	Solid waste	 Plastic-coated cardboard box ²	No specific inactivation ³	Elimination by the cleaners	² Code843 in SV store ³ Material is transported to Tridel for incineration
	Semi-solid ¹	 30 L yellow autoclave box ⁵	Inactivation by autoclaving	Elimination by SV-IN	¹ For example, agarose plates or agarose tubes ⁵ Delivered by SV-IN
	Sharps, broken glass, needles	 Sharp containers	Inactivation by autoclaving	Elimination by SV-IN ⁶	⁶ After autoclaving, sharp containers are eliminated as special waste. OMOD Code: 15 01 10

Table 3	State	Containment Packaging	Treatment	Elimination	Remarks
Risk group 2 organisms	Solid waste	 Steri-safe auto-clave bags ⁷ or 30 L yellow autoclave box ⁵ 	Inactivation by autoclaving	Elimination by SV-IN	¹ For example, agarose plates or agarose tubes ⁷ Code19 in SV Store ⁵ Delivered by SV-IN
	Semi-solid ¹	 30 L yellow autoclave box ⁵	Inactivation by autoclaving	Elimination by SV-IN	¹ Agarose plates or agarose tubes ⁵ Delivered by SV-IN
	Sharps, broken glass, needles	 Sharp containers	Inactivation by autoclaving	Elimination by SV-IN ⁶	⁶ After autoclaving, sharp containers are eliminated as special waste. OMOD Code: 15 01 10

2. Treatment & elimination of solid waste

2.1. Inactivation by heat (autoclave)

2.1.1. Autoclave bags

- Biological waste that needs to be autoclaved is collected in Steri-Safe-Bag that can be ordered through the SV faculty shop (Code19 in SV magasin). [Color code GREY or WHITE].
- The bags must show the Biohazard warning sign.
- When $\frac{3}{4}$ full, tightly close the bag, decontaminate the outside of the bag with a proper decontaminant (see point 2.2), tag it with the group bar code and dispose for removal.

2.1.2. Autoclave bins

- 30 L yellow autoclave bins are distributed by the SV-IN washing/waste core facility.
- The 30 L bins are mainly used for:
 - Bacterial plates, yeast cultures, *C. elegans* plates, semi-solid waste such as feces or agar).
 - Plastic pipets used in BSL2 or BSL3.
 - Glass Pasteur pipets used in BSL1, BSL2 or BSL3 when used in large quantities.

- When full, close the lid making sure that all the closing elements are engaged. Decontaminate the outside of the bin, tag it with the group bar code and dispose for removal.

2.1.3. Sharps safe collection containers

- Sharps, needles, glass debris, microscope slides, cover slips that need to be autoclaved are collected into Yellow Sharp Boxes showing the Biohazard warning sign. Once $\frac{3}{4}$ full, the box is tightly closed, sealed, decontaminated on the outside and handed to the collection staff.
- Non-contaminated sharp materials (needles, slides, etc.) have to be collected in similar Yellow Sharp Boxes, without the Biohazard warning pictogram. Once full and tightly closed, they can be put into the bags dedicated to biomedical research waste.
- Sharps contaminated with hazardous/toxic chemicals must be eliminated as chemical waste.

2.2. Incineration

2.2.1. White bags with red-stripes

- All bio-medical research waste that does not belong to one of the special category.
- Bags are provided and collected by the cleaners.

2.2.2. Plastic-coated cardboard box

- UN3291 cardboard boxes [code843] are available from the SV store.].
- They are used for genetically-modified BSL1 solid waste and for BSL1 plastic pipets.

3. Versioning

20.01.2015	version 1.0	
18.09.2015	version 1.1	No more 50L autoclave bins, only 30L available.