

Professional Laundry Instructions for Healthcare Use

The conditions below for front-loading washing machines, followed by tumble drying, and should be used as a guide for the laundry to develop a more detailed standard operating procedure specific to their equipment. Initial trials are recommended ~

Step	Operation	Time	Temperature	Level	Conditions
1	Rinse	3 min.	Cold	High	See note 1.2 below
2	Wash	3 min.	71°C (160°F)	Low	Detergent & alkali pH 10
					See note 1.6 below
3	Rinse	3 min.	60°C (140°F)	High	
4	Spin	2 min.			Preferably low speed
5	Rinse	2 min.	50°C (120°F)	High	
6	Rinse	2 min.	40°C (100°F)	High	
7	Rinse	2 min.	Cold	High	
8	Acidify	5 min.	Cold	Low	Acidify to pH 6
9	Spin	3-5 min.			Preferably low speed

1. Washing recommendations

- 1.1 All new water repellent gowns and drapes should be laundered prior to use.
- 1.2 Two rinses in cold water should remove blood. For heavy set blood stains it may be necessary to soak overnight with an enzyme in cold water.
- 1.3 The non-ionic detergent should have a cloud point above 71°C (160°F).
- 1.4 **Caution:** pH should not exceed 10. Polyester reacts slowly with alkali; fabric properties, especially tear strength will be preserved by keeping the pH as close to neutral as possible.
- 1.5 **Caution:** Oxidative bleaching agents must not be used, these agents include sodium hypochlorite, hydrogen peroxide and per(oxy)acetic acid (PAA). For polyester-based surgical fabrics, oxidative bleaches should not be necessary, however where their use is mandatory, trials will be needed using the minimum amount allowed. Continued use of bleach may cause a loss of colour and damage to the water repellent finish.
- 1.6 For disinfection of soiled linen the temperature of the load is maintained at 65°C (150°F) for not less than 10 minutes or preferably at 71°C (160°F) for not less than 3 minutes. With both options, "mixing time" must be added to ensure heat penetration of the wash load. Typically this can be 4 minutes for a lightly loaded machine up to 8 minutes for a machine with a heavy degree of loading.
- 1.7 Exceeding 80°C during washing is not recommended, cooler temperatures will preserve the life of the garments.
- 1.8 Controlled cooling after washing to 40°C is beneficial in preventing creasing.

- 1.9 **Caution:** If water repellent, a thorough rinse is essential to remove all traces of surfactant, as residual detergent will adversely affect the water / oil repellency properties.
- 1.10 **Caution:** Care must be taken to ensure that the fabric receives an adequate neutralization (souring) treatment after washing to remove any traces of alkali from the fabric.
- 1.11 Do not over-load the washer or dryer.
- 1.12 Fabric softeners should not be used on water repellent fabrics.

2. Drying recommendations

- 2.1 Always ensure that the washed items are thoroughly dried with heat.
- 2.2 The tumble dryer exhaust temperature should not exceed 75°C (170°F).
- 2.3 A cool down period will minimise creasing.
- 2.4 A final warm press of the fabric will optimise the performance of the water repellent finish.
- 2.5 Washers and dryers should be inspected regularly to ensure there are no rough spots that could damage the fabric.

3. Sterilization recommendations

- 3.1 The majority of our customers are using 'Porous Load' sterilizers with saturated steam at 134°C, but other sterilization techniques may also be appropriate.
- 3.2 In the UK, the laundry / hospital should follow current NHS guidance, which is covered in 'HTM 01-01'. (Ref: HTM 01-04, Section 5 point 5.50)

Updated: November 2016