Miele

Certificate

Safe and hygienic reprocessing of laundry with Miele Professional washing machines from the Little Giants range

Washing machines from the Little Giants model range (PWM 507, PWM 508, PWM 507 Hygiene, PWM 906, PWM 907 and PWM 908, as well as the PWM 506 Mop Star and PWM 508 Mop Star) incorporate disinfection programmes which subscribe to regulations issued by the Robert Koch Institute (RKI) and the Association for Applied Hygiene (VAH). The precise designations of programmes are listed in Appendix A.

These strict requirements refer, inter alia, to the maintenance of temperatures in the wash liquor during the disinfection phase. These machines guarantee that selected temperatures are maintained for the time specified in the relevant programmes. In disinfection programmes, in particular, temperatures are maintained with tightly controlled hysteresis above the selected value in order to prevent any drop in temperature below the target temperature.

These machines also include further safety functions to ensure proper disinfection or to inform users if disinfection has not been achieved:

- **Programme lock: The machine door can only be opened at the end of a wash cycle.**
- **If, due to an error, the temperature is not maintained, the programme is aborted and an error message issued.**
- **When a dispensing system with level sensing is connected, an empty container results in an aborted programme and an appropriate error message.**
- **No further water intake via detergent dispenser after disinfection phase.**

All claims relating to safe hygienic disinfection apply exclusively to official and unmodified Miele wash programmes under the presumption that all guidance contained in operating instructions are fully complied with.

Alongside technical specifications, reliable hygiene also requires that the following is ensured by the operator or the machine‘s owner:

When using chemo-thermal disinfection methods:

- **Use of a disinfecting detergent suitable for disinfection**
- **Compliance with instructions issued by detergent/disinfectant manufacturer, in particular relating to load-to-liquor ratios, in order to ensure the correct amount of detergent is dispensed**

Chemo-thermal disinfection programmes are set to a load-to-liquor ratio of approx. 1:5 for a nominal load with average absorbency.
A load-to-liquor ratio of approx. 1:4 to 1:5 applies to thermal disinfection programmes.

Please note the information concerning RKI- and VAH-compliant disinfection in Appendix B.

- **Validity:** 3 years | Only for models from the Little Giants series (PWM507, PWM508, PWM50x MopStar, PWM90x)
- **Source:** Miele & Cie. KG
- **Scope and term of validity:** 01.06.2023 – 31.12.2026

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Appendix A:

Programme package: RKI disinfection
(available on model versions PWM 507 Hygiene, PWM 906, PWM 907 and PWM 908)

Programme package	Programme ID	Programme name
Disinfection RKI	167	Therm. dis. (RKI) 85°C 15 mins.
	168	Chem. dis. (RKI) 70°C 10 mins.
	169	Chem. dis. (RKI) 60°C 20 mins.
	170	Chem. dis. (RKI) 40°C 20 mins.

Programme package: Disinfection
(available on model versions PWM 507, 507 Hygiene, PWM 508, PWM 906, PWM 907 and PWM 908)

Programme package	Programme ID	Programme name
Disinfection	10	Therm. dis. 85°C 15 mins.
	11	Chem. dis. 70°C 10 mins.
	54	Chem. dis. 60°C 20 mins.
	82	Chem. dis. 40°C 20 mins.

The disinfection programmes differ merely in terms of the optional selection of a pre-wash.
This is not possible on programmes with a designation containing the RKI index.

Disinfection programmes on models PWM 506 Mop Star, PWM 508 Mop Star

Programm ID	Programme designation
184 185	**Mop disinfection 85°C 15 mins.** Mop disinfection 75°C 10 mins.
187 **186** 188	Mop disinfection 70°C 10 mins. **Mop disinfection 60°C 20 mins.** Mop disinfection 40°C 20 mins.
156 157	**Mop disinfection & impregnation 85°C 15 mins.** Mop disinfection & impregnation 75°C 10 mins.
158 **159** 160	Mop disinfection & impregnation 70°C 10 mins. **Mop disinfection & impregnation 60°C 20 mins.** Mop disinfection & impregnation 40°C 20 mins.
86 85 84	**Th. dis. cloths 70°C 10 mins.** Th. dis. cloths 60°C 20 mins. Th. dis. cloths 40°C 20 mins.
163	**Cloths disinfection & impregnation 85°C 15 mins.**
164 165 160	**Cloths disinfection & impregnation 70°C 10 mins.** Cloths disinfection & impregnation 60°C 20 mins. Cloths disinfection & impregnation 40°C 20 mins.

Greyed programmes can be programmed as alternatives. Impregnation programmes have a different water intake path for the impregnation phase.

Appendix B:

Disinfection – general information

What is disinfection?

Deactivation and reduction in number of pathogens transmitting diseases to such an extent that the transmission of diseases and infection is no longer to be anticipated.

Thermal disinfection

Thermal disinfection is carried out by the action of a defined temperature over a holding time.
In the list, according to § 18 IFSG, this is 90°C over 10 mins. or 85°C over 15 mins. With a load-to-liquor ratio of 1 – 4 to 1 – 5 with the activity range AB (cf. Section on 'Disinfection processes according to activity range').
The thermal disinfection is independent of the detergent used, which does not have to be classified.

Chemo-thermal disinfection

Chemo-thermal disinfection differs from thermal disinfection in terms of a lower liquor temperature during the disinfection phase.
Compensation for the low temperature is ensured through the use of listed washing and disinfecting components.
It is important that these products are used exactly according to the listings.
The suds temperature, the load-to-liquor ratio and the time of dispensing must be strictly adhered to.
For disinfection wash programmes there are two lists in which the necessary process parameters with regard to washing and disinfecting agents are listed.

RKI list (Robert Koch Institute)

Describes procedures for disinfection according to § 18 Infection Protection Act. Requirements
These processes are only required when a health authority prescribes the use of disinfection in the event of the outbreak of an epidemic relating to a notifiable, transferable disease where there is a risk of items being contaminated. The RKI list describes both thermal and chemo-thermal disinfection processes.

Disinfection process according to areas of impact

Disinfection procedure differ by the relevant areas of impact A, B and C.
– Area of impact A:
  Suitable for the destruction of vegetative bacteria, including mycobacteria, fungus and fungal spores.
– Area of impact B:
  Suitable for deactivating viruses.
– Area of impact C:
  To deactivate anthrax spores.
  In the event of officially directed disinfection, the first wash liquor may not be discharged until after disinfection has been carried out.

Enclosure:

VAH list

VAH - Association for Applied Hygiene
(formerly DGHM = German Society for Hygiene and Microbiology)

The VAH/DGHM list describes the procedures required for routine prophylactic disinfection, and in particular for the prevention of infection in hospitals, doctors' offices, public areas and other areas where there may be the risk of infection spreading.

With respect to a notifiable disinfection, § 18 of the Infection Protection Act is invoked.

Special validated procedures and machines are to be used for surgical textiles as medical devices. The procedures and machines listed here are not medical devices.

Avoidance of contamination or recontamination

- Disinfect your hands before using the machine.
- Use clean / disinfected transport containers.
- Dispense washing and disinfecting agents in accordance with instructions.
- Observe regulations regarding the wearing of protective clothing.
- Ensure that water is bacteria-free when using a supply from water treatment units.
- Clean detergent dispensing drawers, detergent compartments and siphons before use.

Cleaning dispensing drawers and siphons

The detergent dispensing drawer is subject to constant moisture. It needs to be cleaned regularly to prevent the build-up of water-borne bacteria.

- Clean the detergent dispensing drawer, detergent compartments and siphon thoroughly with hot water as required to remove detergent residues and encrustation.

It is the operator's responsibility to ensure that the standard of disinfection in thermal as well as chemo-thermal procedures is maintained (in accordance with local and national health and safety regulations) by carrying out suitable validation tests. The procedures should be checked periodically and thermoelectrically by means of loggers or bacteriologically using bio-indicators. The operator must pay particular attention to observing the process parameter of temperature and, in the case of chemo-thermal programmes, the concentration. Disinfection programmes must not be interrupted, as this can have a limiting effect on the disinfection result.