



# Programme overview Commercial washing machine PWM 509 PWM 511

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# Programme range for machine versions

Programme group	Programme name	Standard	Mop Star	Self- Service	Optional programme packages (available for purchase)
Standard	Whites	•	-	•	-
Standard	Coloured items	•	•	-	-
Standard	Colours intensive	•	-	-	-
Standard	Colours Eco short	•	-	•	-
Standard	Minimum iron	•	-	•	-
Standard	Delicates	•	-	•	-
Standard	Shirts	•	-	•	-
Standard	Woollens	•	-	•	-
Standard	Handwash. woollens	•	-	-	-
Standard	Separate rinse	•	-	•	-
Standard	Spin	•	•	•	-
Standard	Drain	•	•	•	-
Standard	Starch	•	•	•	-
Standard	Clean machine	•	•	•	-
Hotels, bedding and catering	Bed linen/towelling	•	-	•	
Hotels, bedding and catering	Mattress protectors	•	-	-	
Hotels, bedding and catering	Spa towelling	•	-	-	
Hotels, bedding and catering	Bathrobes	•	-	-	
Hotels, bedding and catering	Kitchen linen	•	-	•	Programme pack-
Hotels, bedding and catering	Table linen	•	-	•	age: Hotels, bedding and
Bedding/ curtains	Curtains	•	•	•	catering
Bedding/ curtains	Lightweight curtains	•	-	•	
Bedding/ curtains	Down duvets	•	-	•	
Bedding/ curtains	Synthetic duvets	•	-	•	
Bedding/ curtains	Natural hair bedding	•	-	•	
Disinfection	Thermal disinfection	•	-	-	-
Disinfection	Chthermal disin. 20 min	•	-	-	-
Disinfection	Chthermal disin. 10 min	-	-	-	
Disinfection	Ch-th. disin. gentle 20 min	-	-	-	Disinfection
Disinfection	Incontinence	-	-	-	Plus programme package
Disinfection	Incontinence laundry	-	-	-	

# Programme range for machine versions

Programme group	Programme name	Standard	Mop Star	Self- Service	Optional programme packages (available for purchase)	
Contract cleaners	Standard mops	-	•	-		
Contract cleaners	Standard mops + rtu	-	•	-		
Contract cleaners	Mops rtu	-	•	-		
Contract cleaners	New mops	-	•	-	Programme package:	
Contract cleaners	Pads	-	•	-	Contract cleaners standard	
Contract cleaners	Standard cloths	-	•	-		
Contract cleaners	Standard cloths + rtu	-	•	-		
Contract cleaners	Cloths rtu	-	•	-		
Contract cleaners	Mops thermal disinfection	-	•	-		
Contract cleaners	Mops thermal disinf + rtu	-	•	-		
Contract cleaners	Mops ch-th disinf 10 min	-	•	-		
Contract cleaners	Mops ch-th disinf 20 min	-	•	-		
Contract cleaners	Mops ch-th dis 10 min+rtu	-	•	-		
Contract cleaners	Mops ch-th dis 20min+rtu	-	•	-	Programme package:	
Contract cleaners	Cloths therm. disinfection	-	•	-	Contract cleaners Disinfection	
Contract cleaners	Cloths therm. disinf + rtu	-	•	-		
Contract cleaners	Cloths ch-th disinf 10 min	-	•	-		
Contract cleaners	Cloths ch-th disinf 20 min	-	•	-		
Contract cleaners	Cloths ch-th dis 10min+rtu	-	•	-		
Contract cleaners	Cloths ch-th dis 20min+rtu	-	•	-		
Contract cleaners	Mats	-	•	-	Programme package:	
Contract cleaners	Heavily soiled mats	-	-	-	Contract cleaners Mats	
Fire brigades	Protective clothing	-	-	-		
Fire brigades	Proof protect. clothing	-	-	-		
Fire brigades	Disin. rescue clothing	-	-	-		
Fire brigades	Dis./proof rescue cloth.	-	-	-		
Fire brigades	Proofing without wash	-	-	-		
Fire brigades	Gloves	-	-	-		
Fire brigades	Helmets	-	-	-	Programme package: Fire brigade	
Fire brigades	Belts	-	-	-	Fire brigade	
Fire brigades	Disin. masks	-	-	-		
Fire brigades	Intensive disin. masks	-	-	-		
Fire brigades	Spin wash bags	-	-	-		
Fire brigades	Chemical prot. suits	-	-	-	-	
Fire brigades	Chemical prot suits special	-	-	-		
Outerwear	Outerwear	•	-	•		
Outerwear	Wash/proofing	•	-	•	Programme package: Outerwear and	
Outerwear	Rinse/ proofing	•	-	•		
Outerwear	Down jackets	•	-	•		
Sport	Sportswear	•	-	•	sport	
Sport	Sport Microfibre	•	-	•		
Sport	Trainers	•	_	•		

# Programme range for machine versions

Programme group	Programme name	Standard	Mop Star	Self- Service	Optional programme packages (available for purchase)
Workwear	Oil/fat	•	-	-	Programme package:
Workwear	Dust/flour	•	-	-	Workwear
Laundry regula- tion HTM01-04	Sluice low	•	-	-	-
Laundry regula- tion HTM01-04	Sluice high	•	-	-	-
Self-Service	Coloured items	-	-	•	-
Self-Service	Colours int + pre-wash	-	-	•	-
Eco	Colours Eco	•	•	•	
Eco	Colours Eco intensive	•	•	•	Programme package:
Eco	Minimum iron Eco	•	•	•	Eco
Eco	Minimum iron Eco intensive	•	•	•	

### Selectable extras

Extra	Symbol	Description
Pre-rinse		Pre-rinse before the wash processes start
Pre-wash		Pre-wash before starting the main wash
Soak	<b>a</b>	Block to start main wash, 30 °C, little movement
Water plus	<del>+</del>	Increase amount of water in main wash
Intensive	Ť	Extension of the main wash after the temperature stop
Rinse plus	\tag{\tag{\tag{2}}	Additional rinse block
Fill stop	IIII	Stop at the start of the last rinse, before water is supplied
Rinse hold	$\Box$	Hold at the end of the last rinse, before water is drained

## Selectable extras for liquid dispensing

Selecting these extras may deselect the relevant detergent component for the next wash cycle.

Extra	Symbol	Description
Detergent	٥	Detergent component is deselected
Additives	<u> </u>	No dispensing of the additive component (e.g. stain booster)
Care product	8	No dispensing of the care product component (e.g. fabric conditioner, proofing agent)

### **Basic programmes**

The **wash time** is the minimum main wash time after the set temperature is reached. The times for water intake, dispensing, heating, intermediate spinning, etc. are not included.

#### Whites programmes

Whites	90 °C (70 °C to 90 °C)	Load ratio/Load size
Fabric	Cotton, linen and mixed fibre fabrics, e.g. bed linen and towelling	
Programme sequence	Main wash up to 90 °C, wash time 11 min Cool down can be activated in the Miele Benchmark Programming Tool 2 rinse cycles Last rinse cycle hot* Final spin	1:9 PWM 509 – 9 kg PWM 511 – 11 kg
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

<sup>\*</sup> The standard programmes **Whites** and **Coloured items** are programmed with hot water rinse cycles. If hot water is available, we recommend using hot water for the final rinse cycle:

<sup>-</sup> There is less residual moisture in the laundry after spinning.

<sup>-</sup> The laundry is already warmed.

<sup>-</sup> This saves time and energy if the laundry is immediately either dried in a tumble dryer or ironed with an ironer.

### **Coloured items programmes**

Coloured items	60 °C (Cold to 60 °C)	Load ratio/load size
Fabric	Normally soiled cotton, linen and mixed fibre fabrics, e.g. bed linen and towelling	
Programme sequence	Main wash up to 60 °C, wash time 11 min 2 rinse cycles Last rinse cycle hot* Final spin	1:9 PWM 509 – 9 kg PWM 511 – 11 kg
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Colours intensive	60 °C (Cold to 60 °C)	Load ratio/load size
Fabric	Heavily soiled cotton, linen or mixed fibre fabrics, e.g. bed linen and towelling	
Programme sequence	Main wash up to 60 °C, wash time 8 min 2 rinse cycles Last rinse cycle hot* Final spin	1:9 PWM 509 – 9 kg PWM 511 – 11 kg
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Colours Eco short	50 °C (Cold to 60 °C)	Load ratio/load size
Fabric	Lightly soiled cotton, linen and mixed fibre fabrics, e.g. bed linen and towelling	1.0
Programme sequence	Main wash up to 60 °C, wash time 5 min 2 rinse cycles Final spin	1:9 PWM 509 – 9 kg PWM 511 – 11 kg
Extras	Pre-wash, Water plus, Rinse plus, Fill stop, Rinse hold	

<sup>\*</sup> The standard programmes **Whites** and **Coloured items** are programmed with hot water rinse cycles. If hot water is available, we recommend using hot water for the final rinse cycle:

— There is less residual moisture in the laundry after spinning.

— The laundry is already warmed.

— This saves time and energy if the laundry is immediately either dried in a tumble dryer or ironed with a flatwork ironer.

### Minimum iron programmes

Minimum iron	40 °C (Cold to 60 °C)	Load ratio/Load size
Fabric	Normally soiled synthetic and mixed fibre fabrics	
Programme sequence	Main wash up to 60 °C, wash time 7 min 2 rinse cycles Final spin	1:20 PWM 509 – 4 kg PWM 511 – 5 kg
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	FWW SII - 5 Kg

## **Delicates/Shirts/Woollens programmes**

Delicates	30 °C (Cold to 60 °C)	Load ratio/Load size
Fabric	Synthetic and artificial fibre fabrics	
Programme sequence	Main wash up to 60 °C, wash time 12 min Wash rhythm "gentle" 2 rinse cycles Final spin	
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Shirts	40 °C (Cold to 60 °C)	
Fabric	Shirts and blouses made of cotton and mixed fibre	
Programme sequence	Main wash up to 60 °C, wash time 7 min 2 rinse cycles Final spin	
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Woollens	30 °C (Cold to 40 °C)	1:25
Fabric	Machine washable woollens and wool mixtures with a woollens care label	PWM 509 – 3.2 kg PWM 511 – 4 kg
Programme sequence	Main wash up to 40 °C, wash time 6 min Wash rhythm "very gentle" 2 rinse cycles Final spin	
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Handwash. woollens	30 °C (Cold to 40 °C)	
Fabric	Washable woollens and wool mixtures with a woollens care label	
Programme sequence	Main wash up to 40 °C, wash time 6 min Wash rhythm "extra gentle" 2 rinse cycles Final spin	
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

### Separate rinse programme

Separate rinse		Load ratio/Load size
Fabric	Items which only need to be rinsed and spun	1.0
Programme sequence	1 rinse cycle Final spin	1:9 PWM 509 – 9 kg PWM 511 – 11 kg
Extras	Fill stop, Rinse hold	FVVIVI SII — II Kg

### Spin

Spin		Load ratio/Load size
Fabric	Items which have been washed and only need to be spun in the machine	1:9
Programme sequence	Final spin	PWM 509 – 9 kg PWM 511 – 11 kg

#### Drain

Drain		
Programme sequence	Drainage	

### Starch programme

Starch	30 °C (Cold to 40 °C)	Load ratio/Load size
Fabric	For starching freshly laundered items such as table cloths, serviettes and workwear	1:10
Programme sequence	1 rinse cycle* Final spin	PWM 509 – 8 kg PWM 511 – 10 kg
Extras	Rinse hold	

<sup>\*</sup> Starch concentrates can be added to the front right and/or back right dispenser drawer compartment 🕙 before the programme starts. Large quantities of starch solution can be added manually with the water using the dispenser compartments 🗓 or 🗓.

### Clean machine

Clean machine	70 °C (70 °C to 90 °C)	
Fabric	No load	
Programme sequence	+ Till Intensive button: additional main wash up to 90 °C, wash time 6 min 2 rinse cycles Drainage	
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop	

## Programme chart - Hotel/Restaurant/Catering

A multitude of textiles with widely varying degrees of soiling fall into this area. These programmes are suitable for washing lightly soiled bedding and towels, through heavily soiled table linen to very heavily soiled kitchen linen.

### Bed linen/towelling programme

Bed linen/towelling	60 °C (Cold to 90 °C)	Load ratio/Load size
Fabric	Cotton, linen and mixed fibre coloured and white bed linen and towelling	
Programme sequence	Main wash up to 90 °C, wash time 10 min Cool down can be activated in the Miele Benchmark Programming Tool 2 rinse cycles Final spin	1:10* PWM 509 – 8 kg PWM 511 – 10 kg
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

<sup>\*</sup> Wash with maximum load.

### Mattress protectors programme

Mattress protectors	60 °C (Cold to 90 °C)	Load ratio/Load size
Fabric	Synthetic waterproof mattress protectors	
Programme sequence	Main wash up to 90 °C, wash time 6 min 2 rinse cycles Final spin	1:13 PWM 509 – 6.2 kg PWM 511 – 7.8 kg
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

### Spa towelling programme

Spa towelling	50 °C (Cold to 90 °C)	Load ratio/Load size
Fabric	Coloured and white cotton, linen or mixed fibre bed linen and towelling, with heavy oil and grease stains	
Programme sequence	Main wash up to 90 °C + 🖺 Extra main wash 75 °C, optional** 2 rinse cycles Final spin	1:13* PWM 509 – 6.2 kg PWM 511 – 7.8 kg
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

<sup>\*</sup> Wash with maximum load.

#### Bathrobes programme

Bathrobes	60 °C (Cold to 90 °C)	Load ratio/Load size
Fabric	Cotton and mixed fibre bathrobes (select + LL Prewash 40 °C for heavily soiled items)	
Programme sequence	+ ☐ Pre-wash 40 °C, optional Main wash up to 90 °C 2 rinse cycles Final spin	1:13* PWM 509 – 6.2 kg PWM 511 – 7.8 kg
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

<sup>\*</sup> Wash with maximum load.

<sup>\*\*</sup> For heavy soiling, for example by creams and massage oils, an additional clear wash with elevated temperature can be selected. In the case of coloured stains, additional bleach can be dispensed.

### Kitchen linen

Kitchen linen	90 °C (Cold to 90 °C)	Load ratio/Load size
Fabric	Cotton, linen and mixed fibre kitchen linen	
Programme sequence	Pre-rinse Main wash up to 90 °C, wash time 10 min Cool down can be activated in the Miele Benchmark Programming Tool 3 rinse cycles Final spin	1:13 PWM 509 – 6.2 kg PWM 511 – 7.8 kg
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

### Table linen programme

Table linen	60 °C (Cold to 90 °C)	Load ratio/Load size
Fabric	White and coloured cotton, linen and mixed fibre table linen	
Programme sequence	Main wash up to 90 °C, wash time 10 min Cool down can be activated in the Miele Benchmark Programming Tool 2 rinse cycles Final spin	1:10 PWM 509 – 8 kg PWM 511 – 10 kg
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

## **Bedding/Curtains**

### **Curtains**

Curtains	40 °C (Cold to 60 °C)	Load ratio/Load size
Fabric	Synthetic and artificial fibre fabrics	
Programme sequence	Main wash up to 60 °C, wash time 14 min 3 rinse cycles Final spin	
Extras	Pre-rinse, Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	1.05
Lightweight curtains	40 °C (Cold to 60 °C)	1:25 PWM 509 – 3.2 kg
Fabric	Synthetic and artificial fibre fabrics	PWM 511 – 4 kg
Programme sequence	Pre-rinse Main wash up to 60 °C, wash time 6 min 3 rinse cycles Final spin	
Extras	Pre-rinse, Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

Programme sequence without spin:

■ Press the ☐ "Rinse hold" button.

### **Bedding**

These programmes are suitable for washing down, natural fibre and synthetic filling quilts, unquilted and quilted duvets.

These wash programmes are only suitable for washing items with a care label stating that they are suitable for machine washing.

### For SES version only

Down duvets	40 °C (Cold to 60 °C)	Load ratio/Load size
Fabric	Normally to heavily soiled down and feather-filled duvets and pillows	
Programme sequence	De-aerating Main wash up to 60 °C, wash time 8 min 2 rinse cycles Final spin	
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Synthetic duvets	40 °C (Cold to 90 °C)	
Fabric	Normally to heavily soiled synthetic duvets and pillows	
Programme sequence	Main wash up to 90 °C, wash time 8 min 2 rinse cycles Final spin	See "Bedding load sizes"
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Natural hair bedding	25 °C (Cold to 40 °C)	
Fabric	Machine washable natural fibre quilts and blankets	
Programme sequence	Main wash up to 40 °C, wash time 6 min, wash rhythm "extra gentle" 2 rinse cycles Final spin	
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

### **Bedding load sizes**

The maximum load sizes are set out in the chart below. The loads given are approximate only and vary depending on the size and thickness of the bedding.

Model	Quantity*
PWM 509	1–2 pillows
PWM 511	1 duvet

<sup>\*</sup> A duvet is equal to approx. 2 pillows.

**Tip:** Unquilted duvets must be tied a few times to keep imbalance to a minimum and ensure good wash results.

### **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 of the German infection control legislation, this is 90 °C over 10 min or 85 °C over 15 min. With a load-to-liquor ratio of 1–4 to 1–5 with the activity range AB (see "Disinfection process according to areas of impact").

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 by a lower liquor temperature during the disinfection phase. A compensation for the low temperature is ensured by the correspondingly listed washing and disinfecting components.

It is important that these products are used exactly according to the listings. The liquor 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 cleaning agents and disinfectants are listed.

#### **RKI list (Robert Koch Institute)**

Describes procedures for disinfection according to § 18 German infection control legislation. 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 lists thermal disinfection processes as well as chemo-thermal methods.

#### Disinfection process according to areas of impact

Disinfection procedure is divided into areas of impact A, B and C.

- Area of impact A:
   Suitable for the destruction of vegetative germs, including mycobacteria, mould fungi and fungal spores.
- Area of impact B: Suitable for deactivating viruses.
- Area of impact C: To deactivate anthrax spores.

#### **VAH list**

VAH = Association for Applied Hygiene (previously 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 an officially directed 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 cleaning agents and disinfectants in accordance with instructions.
- Observe regulations regarding the wearing of protective clothing.
- Ensure that water is bacteria-free when using water from water treatment units.
- Clean detergent drawers, detergent compartments and siphons before use.

#### Cleaning dispensing drawers and siphons

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

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

It is the supervisor's responsibility to ensure that the standard of disinfection in thermal as well as chemo thermal procedures is maintained (from the list, in accordance with § 18 German infection control legislation) by carrying out suitable validation tests. The procedures should be checked at regular intervals, thermoelectrically by means of loggers or bacteriologically using bio-indicators. The supervisor must pay particular attention to observing the process parameters 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.

#### Water connection for variants with reduced heater rating (RH)

The appliance should be connected to cold and hot water supplies. A minimum hot water temperature of 80 °C is recommended in order to use all programmes. Lower temperatures may result in longer programme running times or cause programmes to be interrupted. Water inlet temperatures below 60 °C are not permitted, as they can lead to significantly longer programme running times.

#### Water connection for variants with external heating (EH)

The appliance should be connected to cold and hot water supplies. A minimum hot water temperature of 80 °C is recommended. The use of disinfection programmes is not possible due to the absence of additional heating. The permissible wash temperatures are determined by the inlet temperature.

#### Disinfection

**Thermal disinfection** and **chemo-thermal disinfection** are programmes for disinfecting textiles.

Thermal or chemo-thermal disinfection is carried out. Suitable detergents are to be used for the chemo-thermal disinfection.

All programmes are **locked**. This means that after 1 minute into a programme, they can only be cancelled, stopped or have parts skipped by entering the "Expert code" (see operator level).

To avoid recontamination, the water inlet for the rinse cycles in the disinfection programmes is not supplied via the detergent drawer.

To disinfect contaminated mains water, a **disinfection rinse** can be activated instead of the last rinse cycle. In this rinse, the rinse water is heated to 65 °C to deactivate waterborne bacteria. The programme running time is extended and the door can only be opened once the temperature in the machine has fallen below 50 °C.

If "Pre-wash" is selected, place the detergent directly in the drum. If necessary, the  $\sqcup$  and  $\sqcup$  compartments can be used to add detergent in the main wash cycle.

Thermal disinfection	90 °C	Load ratio/load size	
Fabric	Cotton, linen e.g. bed linen, towelling		
Programme sequence	Disinfection 90 °C, holding time 10 min Cool down and/or disinfection rinse can be activated in the Miele Benchmark Programming Tool 2 rinse cycles Final spin	1:9 PWM 509 – 9 kg PWM 511 – 11 kg	
Extras	Pre-wash, Soak, Intensive, Rinse plus, Fill stop, Rinse hold		
Chthermal disin. 10	min 70 °C		
Fabric	Cotton, linen e.g. bed linen, towelling		
Programme sequence	Disinfection 70 °C*, holding time 10 min 2 rinse cycles (optional disinfection rinse can be activated) Final spin		
Extras	Pre-wash, Soak, Intensive, Rinse plus, Fill stop, Rinse hold	1:10	
Chthermal disin. 20	min 60 °C	PWM 509 – 8 kg	
Fabric	Cotton, linen e.g. bed linen, towelling	PWM 511 – 10 kg	
Programme sequence	Disinfection 60 °C*, holding time 20 min 2 rinse cycles (optional disinfection rinse can be activated) Final spin		
Extras	Pre-wash, Soak, Intensive, Rinse plus, Fill stop, Rinse hold		

<sup>\*</sup> The disinfection parameters for chemo-thermal disinfection (temperature, temperature holding time and dispensing quantities) must be set on site to suit detergents and disinfectants.

If "Pre-wash" is selected, place the detergent directly in the drum. If necessary, the und und compartments can be used to add detergent in the main wash cycle.

Ch-th. disin. gentle 20	Ch-th. disin. gentle 20 min 40 °C				
Fabric	Cotton, mixed fibre, curtains				
Programme sequence	Disinfection 40 °C*, holding time 20 min Wash rhythm "gentle" 3 rinse cycles (optional disinfection rinse can be activated) Final spin	1:10 PWM 509 – 8 kg PWM 511 – 10 kg			
Extras	Pre-wash, Soak, Intensive, Rinse plus, Fill stop, Rinse hold				
Incontinence	90 °C				
Fabric	Washable incontinence nappy systems				
Programme sequence	Pre-rinse bath Pre-wash up to 40 °C Disinfection 90 °C, holding time 10 min Cool down and/or disinfection rinse can be activated in the Miele Benchmark Programming Tool 3 rinse cycles Final spin				
Extras	Pre-rinse, Soak, Intensive, Rinse plus, Fill stop, Rinse hold	1:13			
Incontinence laundry	90 °C	PWM 509 – 6.2 kg PWM 511 – 7.8 kg			
Fabric	Heavily soiled personal clothing, cotton	1 WITI 511 - 1.0 Kg			
Programme sequence	2 pre-rinse baths Pre-wash up to 40 °C Disinfection 90 °C, holding time 10 min 3 rinse cycles Cool down and/or disinfection rinse can be activated in the Miele Benchmark Programming Tool Final spin				
Extras	Soak, Intensive, Rinse plus, Fill stop, Rinse hold				

<sup>\*</sup> The disinfection parameters for chemo-thermal disinfection (temperature, temperature holding time and dispensing quantities) must be set on site to suit detergents and disinfectants.

If "Pre-wash" is selected, place the detergent directly in the drum. If necessary, the und compartments can be used to add detergent in the main wash cycle.

### **Buildings maintenance**

These programmes are suitable for washing, disinfecting and finishing (at different humidity levels) cotton or mixed fibre mops, floor mats, polishing pads and cleaning cloths used in facility management.

Cleaning textiles can even come out of the machine finished and ready for use (ready to use – rtu).

To avoid recontamination, the water for the rinse cycles in the disinfection programmes is not supplied via the detergent drawer.

With the **Mops...+ ready to use (rtu)** programme, the mops are ready to use and already impregnated with cleaning agent or detergent and disinfectant. To achieve this, following washing or disinfection there is a finishing stage and then a final spin. The desired humidity level of the mops can vary by setting the residual moisture via the extra " $\delta$  —  $\delta\delta\delta\delta$ " (moist, damp, wet, dripping wet).

The dispensing quantities must be set on site and the standard of disinfection must be checked.

### Мор

■ To prevent coarse soiling in the machine, shake out the mops before putting them in.

Standard mops	60 °C (Cold to 90 °C)	Load ratio/load size
Fabric	Cotton, viscose, polyester and microfibre mops	
Programme sequence	Pre-spin Pre-rinse bath 2nd pre-rinse bath can be activated via extra "Pre- rinse" Main wash up to 90 °C, wash time 6 min Cool down can be activated in the Miele Benchmark Programming Tool 2 rinse cycles Final spin	1:9 PWM 509 – 9 kg PWM 511 – 11 kg
Extras	Pre-rinse, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	For number,
Standard mops + rtu	60 °C (Cold to 90 °C)	"Mops load size"
Fabric	Cotton, viscose, polyester and microfibre mops	chart
Programme sequence	Same programme sequence as Mops standard then set the residual moisture via the extra "δ – δδδδ" (moist, damp, wet, dripping wet) The pre-set residual moisture is 2 drops (damp)	
Extras	Pre-rinse, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

Mops thermal disinfe	Load ratio/load size		
Fabric	Cotton, viscose, polyester and microfibre mops		
Programme sequence	Pre-spin Pre-rinse bath 2nd pre-rinse bath can be activated via extra "Pre- rinse" Disinfection 90 °C, holding time 10 min Cool down and/or disinfection rinse can be activated in the Miele Benchmark Programming Tool 3 rinse cycles Final spin	1:9 PWM 509 – 9 kg	
Extras	Pre-rinse, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	PWM 511 — 11 kg For number, see	
Mops thermal disinf -	Mops thermal disinf + rtu 90 °C		
Fabric	Cotton, viscose, polyester and microfibre mops	"Mops load size" chart	
Programme sequence	Same programme sequence as Mops thermal disinfection, then set the residual moisture via the extra "۵ – ۵۵۵۵" (moist, damp, wet, dripping wet) The pre-set residual moisture is 2 drops (damp)		
Extras	Pre-rinse, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold		

If "Pre-wash" is selected, place the detergent directly in the drum. If necessary, the und compartments can be used to add detergent in the main wash cycle.

Mops ch-th disinf 10	Mops ch-th disinf 10 min 70 °C				
Fabric	Cotton, viscose, polyester and microfibre mops				
Programme sequence	Pre-spin Pre-rinse bath 2nd pre-rinse bath can be activated via extra "Pre- rinse" Disinfection* 70 °C, holding time 10 min 3 rinse cycles (optional disinfection rinse can be activ- ated) Final spin				
Extras	Pre-rinse, Soak, Intensive, Rinse plus, Fill stop, Rinse hold				
Mops ch-th disinf 20	min 60°C				
Fabric	Cotton, viscose, polyester and microfibre mops				
Programme sequence	Pre-spin Pre-rinse bath 2nd pre-rinse bath can be activated via extra "Pre-rinse" Disinfection* 60 °C, holding time 20 min 3 rinse cycles (optional disinfection rinse can be activated) Final spin	1:10 PWM 509 – 8 kg PWM 511 – 10 kg			
Extras	Pre-rinse, Soak, Intensive, Rinse plus, Fill stop, Rinse hold				
Mops ch-th dis 10 mi	n+rtu 70 °C				
Fabric	Cotton, viscose, polyester and microfibre mops				
Programme sequence	Programme sequence as for Mops chemo-thermal disinfection*, then set the residual moisture via the extra "δ – δδδδ" (moist, damp, wet, dripping wet) The pre-set residual moisture is 2 drops (damp)				
Extras	Pre-rinse, Soak, Intensive, Rinse plus, Fill stop, Rinse hold				

<sup>\*</sup> The disinfection parameters for chemo-thermal disinfection (temperature, temperature holding time and dispensing quantities) must be set on site to suit detergents and disinfectants.

If "Pre-wash" is selected, place the detergent directly in the drum. If necessary, the und compartments can be used to add detergent in the main wash cycle.

Mops ch-th dis 20mi	Mops ch-th dis 20min+rtu 60 °C I			
Fabric	Cotton, viscose, polyester and microfibre mops			
Programme sequence	Programme sequence as for Mops chemo-thermal disinfection*, then set the residual moisture via the extra "δ – δδδδ" (moist, damp, wet, dripping wet) The pre-set residual moisture is 2 drops (damp)	1:10 PWM 509 – 8 kg PWM 511 – 10 kg		
Extras	Pre-rinse, Soak, Intensive, Rinse plus, Fill stop, Rinse hold			
Mops rtu				
Fabric	Cotton, viscose, polyester and microfibre mops			
Programme sequence	1 rinse cycle then set the residual moisture via the extra "δ – δδδδ" (moist, damp, wet, dripping wet) The pre-set residual moisture is 2 drops (damp)	1:9		
Extras	Fill stop, Rinse hold	1:9 PWM 509 – 9 kg		
New mops	60 °C (Cold to 90 °C)	PWM 511 – 11 kg		
Fabric	For washing new mops	For number,		
Programme sequence	Main wash up to 90 °C, wash time 4 min Cool down can be activated in the Miele Benchmark Programming Tool 2 rinse cycles Final spin	see "Mops load size" chart		
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold			

<sup>\*</sup> The disinfection parameters for chemo-thermal disinfection (temperature, temperature holding time and dispensing quantities) must be set on site to suit detergents and disinfectants.

If "Pre-wash" is selected, place the detergent directly in the drum. If necessary, the used to add detergent in the main wash cycle.

The **Mops rtu** programme is suitable for the subsequent finishing of clean and dry mops. A disinfecting agent is applied during finishing.

Dispensing quantities must be set on site and the standard of disinfection must be checked.

#### Mop load size (cotton) applies to the load ratio 1:9

Mop size/ weight	40 cm 190 g/ mop	50 cm 220 g/ mop	60 cm 280 g/ mop	80 cm 360 g/ mop	110 cm 510 g/ mop	130 cm 610 g/ mop	160 cm 720 g/ mop
PWM 509	47	41	32	25	18	15	13
PWM 511	58	50	39	31	22	18	15

**Tip:** When using microfibre mops, the load size is higher due to the lower mop weight.

### Mop load size (microfibre) applies to the load ratio 1:9

Mop size/weight	40 cm 120 g/mop	50 cm 170 g/mop
PWM 509	75	53
PWM 511	92	65

A reduced number may apply to particularly high-volume, light-weight mops.

### Mats/Pads programmes

Mats	40 °C (Cold to 60 °C)	Load ratio/Load size
Fabric	Door mats	
Programme sequence	Pre-rinse Main wash up to 60 °C, wash time 8 min 3 rinsing baths Final spin	1:15 PWM 509 – 5.4 kg PWM 511 – 6.8 kg
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Pads	40 °C (Cold to 60 °C)	
Fabric	Polishing pads	
Programme sequence	Pre-rinse bath Second pre-rinse bath can be activated via extra "Pre-rinse" Main wash up to 60 °C, wash time 10 min 3 rinse cycles Final spin	1:50 PWM 509 – 1.6 kg PWM 511 – 2.0 kg
Extras	Pre-rinse, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

**Tip:** The mats load size may vary depending on the size, stiffness and thickness of the mats.

### **Cloths programmes**

These programmes are suitable for washing, disinfecting and finishing (at different humidity levels) cleaning cloths made of cotton, mixed fibre or microfibre fabric used in facility management.

Standard cloths	60 °C (Cold to 90 °C)	Load ratio/load size
Fabric	Cotton, viscose, polyester and microfibre cleaning cloths	
Programme sequence	Pre-rinse Pre-wash up to 30 °C Main wash up to 90 °C, wash time 6 min 3 rinsing baths Final spin	1:18
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	PWM 509 – 4.6 kg PWM 511 – 5.6 kg
Standard cloths + rtu	60 °C (Cold to 90 °C)	For number,
Fabric	Cotton, viscose, polyester and microfibre cleaning cloths	see "Cloths load size" chart
Programme sequence	Same programme sequence as Cloths standard then set the residual moisture via the extra "δ — δδδδ" (moist, damp, wet, dripping wet) The pre-set residual moisture is 2 drops (damp)	
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

Cloths therm. disinfe	ction 90 °C	Load ratio/load size
Fabric	Cotton, viscose, polyester and microfibre cleaning cloths	
Programme sequence	Pre-rinse Pre-wash up to 30 °C Disinfection 90 °C, holding time 10 min Cool down and/or disinfection rinse can be activated in the Benchmark tool 3 rinsing baths Final spin	
Extras	Soak, Intensive, Rinse plus, Fill stop, Rinse hold	
Cloths therm. disinf +	rtu 90 °C	
Fabric	Cotton, viscose, polyester and microfibre cleaning cloths	1:18
Programme sequence	Same programme sequence as Cloths thermal disinfection then set the residual moisture via the extra "۵ — ۵۵۵۵" (moist, damp, wet, dripping wet) The pre-set residual moisture is 2 drops (damp)	PWM 509 – 4.6 kg PWM 511 – 5.6 kg For number, see "Cloths load size"
Extras	Pre-wash, Soak, Intensive, Rinse plus, Fill stop, Rinse hold	chart
Cloths ch-th disinf 10	min 70 °C	
Fabric	Cotton, viscose, polyester and microfibre cleaning cloths	
Programme sequence	Pre-rinse Pre-wash up to 30 °C Disinfection 70 °C, holding time 10 min 3 rinsing baths (optional disinfection rinse can be activated) Final spin	
Extras	Soak, Intensive, Rinse plus, Fill stop, Rinse hold	

If "Pre-wash" is selected, place the detergent directly in the drum. If necessary, the und compartments can be used to add detergent in the main wash cycle.

Cloths ch-th disinf 20	min 60 °C	Load ratio/load size
Fabric	Cotton, viscose, polyester and microfibre cleaning cloths	
Programme sequence	Pre-rinse Pre-wash up to 30 °C Disinfection 60 °C, holding time 20 min 3 rinsing baths (optional disinfection rinse can be activated) Final spin	
Extras	Soak, Intensive, Rinse plus, Fill stop, Rinse hold	
Cloths ch-th dis 10mi	n+rtu 70 °C	
Fabric	Cotton, viscose, polyester and microfibre cleaning cloths	1:18
Programme sequence	Programme sequence as for Cloths chemo-thermal disinfection, then set the residual moisture via the extra "δ – δδδδ" (moist, damp, wet, dripping wet) The pre-set residual moisture is 2 drops (damp)	PWM 509 – 4.6 kg PWM 511 – 5.6 kg For number, see "Cloths load size"
Extras	Pre-wash, Soak, Intensive, Rinse plus, Fill stop, Rinse hold	chart
Cloths ch-th dis 20mi	n+rtu 60 °C	
Fabric	Cotton, viscose, polyester and microfibre cleaning cloths	
Programme sequence	Programme sequence as for Cloths chemo-thermal disinfection, then set the residual moisture via the extra "δ – δδδδ" (moist, damp, wet, dripping wet) The pre-set residual moisture is 2 drops (damp)	
Extras	Pre-wash, Soak, Intensive, Rinse plus, Fill stop, Rinse hold	

If "Pre-wash" is selected, place the detergent directly in the drum. If necessary, the und compartments can be used to add detergent in the main wash cycle.

Cloths rtu		Load ratio/load size
Fabric	Cotton, viscose, polyester and microfibre cleaning cloths	1:18  PWM 509 – 4.6 kg  PWM 511 – 5.6 kg  For number,  see  "Cloths load size" chart
Programme sequence	1 rinse cycle then set the residual moisture via the extra "δ — δδδδ" (moist, damp, wet, dripping wet) The pre-set residual moisture is 2 drops (damp)	
Extras	Fill stop, Rinse hold	

#### Cloths load size applies to the load ratio 1:18

Cloths size/weight	16 g/cloth	22 g/cloth	43 g/cloth
PWM 509	290	210	105
PWM 511	350	255	130

The programme **Standard cloths** is also suitable for cleaning cloths that are not to be used immediately after washing, but are to be stored after drying.

With the **Cloths...+ rtu** programmes, the cloths are ready to use and already impregnated with detergent and disinfectant. To achieve this, following washing or disinfection there is a finishing stage and then a final spin. The desired moisture level of the cloths can vary by setting the residual moisture via the extra " $\delta - \delta\delta\delta\delta$ " (moist, damp, wet, dripping wet). Dispensing quantities must be set on site and the standard of disinfection must be checked.

The **Cloths rtu** programme is suitable for the subsequent finishing of clean and dry cleaning cloths. A disinfecting agent is applied during finishing. Dispensing quantities must be set on site and the standard of disinfection must be checked.

### Fire brigade programme overview

These programmes are suitable for washing and proofing Nomex fire-fighting apparel, jackets and trousers, breathing masks and chemical protective suits.

### Protective clothing programmes

Protective clothing	60 °C (Cold to 60 °C)	Load ratio/Load size
Fabric	Nomex fire-fighting apparel, jackets, trousers	
Programme sequence	Pre-cleaning up to 40 °C Main wash up to 60 °C, wash time 6 min 3 rinse cycles, Final spin	
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Protective cloth. + pro	oof 60 °C (Cold to 60 °C)	
Fabric	Nomex fire-fighting apparel, jackets, trousers	
Programme sequence	Pre-cleaning up to 40 °C Main wash up to 60 °C, wash time 6 min 3 rinse cycles Proofing bath 40 °C Final spin	See "Protective clothing load size" chart
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Proof protect. clothin		
Fabric	Nomex fire-fighting apparel, jackets, trousers	
Programme sequence	1 rinsing bath Proofing bath 40 °C Final spin	
Extras	Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

### **Protective clothing load size**

Model	Quantity
PWM 509	1 suit (or 1–2 jackets)
PWM 511	1–2 suits (2 jackets)

### **Preparing Protective clothing for washing**

- Do not staple labels to the items.
- Remove carabiner hooks if possible, or enclose them in a side pocket.
- Close Velcro fasteners or cover them with Velcro tape.
- Wash sheepskin linings separately.
- Do not wash garments inside out.
- Observe the load sizes.

**Protective clothing** is a programme for washing fire-fighting apparel. It is not suitable for washing garments containing wool as lining material.

**Tip: Detergent:** We recommend using a liquid detergent with reduced pH that is particularly effective for dissolving grease and pigmentation stains.

The proofing agent must be suited to the special requirements of this area of use.

### Masks programmes

Masks are programmes for washing and disinfecting breathing masks with head straps.

- Put the head bands over the masks to protect the visors before loading the machine.
- Put each mask into its own protective bag and fasten it.

The protective bags are available to order from the Miele Customer Service Department.

- Remove the masks from the bags after reprocessing.
- Spin damp, empty protective bags using the **Spin bags** programme.

Masks	60 °C	Load ratio/load size
Load	Breathing masks with head straps	
Programme sequence	Disinfection* 60 °C, holding time 20 min 4 rinse cycles (optional disinfection rinse can be activated), drainage	
Extras	Soak, Intensive, Rinse plus, Fill stop, Rinse hold	
Masks with pre-wash	n 60 °C	PWM 509 – 4–5 masks PWM 511 – 6–7 masks
Load	For heavily soiled breathing masks with head straps	
Programme sequence	Pre-cleaning 30 °C Disinfection* 60 °C, holding time 20 min 4 rinse cycles (optional disinfection rinse can be activated), drainage	
Extras	Soak, Intensive, Rinse plus, Fill stop, Rinse hold	
Spin wash bags		
Load	Mask bags	
Programme sequence	Spinning	1:20

<sup>\*</sup> The disinfection parameters for chemo-thermal disinfection (temperature, temperature holding time and dispensing quantities) must be set on site to suit detergents and disinfectants.

If "Pre-wash" is selected, place the detergent directly in the drum. If necessary, the used to add detergent in the main wash cycle.

To avoid recontamination, the water inlet for the rinse cycles in the disinfection programmes is not supplied via the detergent drawer.

Do not wash masks with connections for helmet-mask combinations. The clasps are likely to scratch visors.

Use a suitable detergent. Observe the manufacturer's instructions.

Helmets*	60 °C (Cold to 60 °C)	Load ratio/load size
Fabric	Firefighter helmets	
Programme sequence	Pre-wash up to 40 °C Main wash up to 60 °C, wash time 16 min 3 rinse cycles, drainage	PWM 509 – 2 helmets PWM 511 – 2 helmets
Extras	Soak, Rinse plus	2 1101111013

<sup>\*</sup> The safety helmet manufacturer must allow the helmet to be washed or dried by machine.

Before loading the machine, push the sliding visor, if applicable, into the safety helmet. Place one helmet in each of the padded protective bags provided and close them.

The protective bags are available to order from the Miele Customer Service Department.

Remove easily removable attachments from the helmet and wash in a separate washing net.

Gloves	40 °C (Cold to 40 °C)	Load ratio/load size
Fabric	Gloves with and without leather trim	
Programme sequence	Pre-wash up to 35 °C, main wash up to 40 °C, wash time 9 min 3 rinse cycles (3rd rinse cycle with option of leather care, 35 °C) Final spin	PWM 509 — 17 pairs of gloves PWM 511 — 20 pairs of gloves
Extras	Soak, Water plus, Rinse plus	8.0100

After washing, air-dry the gloves with and without leather trim. Before drying, roll the leather gloves or gloves with leather trim through your hands to maintain the elasticity of the leather.

Belts*	40 °C (Cold to 40 °C)	Load ratio/load size
Fabric	Fire brigade belts also with aluminium components and leather trim	
Programme sequence	Main wash up to 40 °C, wash time 8 min 3 rinse cycles Final spin	PWM 509 – 6 belts PWM 511 – 7 belts
Extras	Pre-wash, Rinse plus	

<sup>\*</sup> The belt manufacturer must allow the belt to be washed by machine.

If there are aluminium attachments on the belts, we recommend using a liquid delicates detergent with reduced pH value which is particularly effective for dissolving pigmentation stains.

Place 2–3 belts (safety belts) in each of the padded protective bags provided and close them.

The protective bags are available to order from the Miele Customer Service Department.

After washing, air-dry the belts. Before drying, roll the leather components through your hands and, if necessary, treat them with a suitable leather refatting agent to maintain the elasticity of the leather.

Emergency services clothing is a programme for disinfecting. It is not suitable for washing garments containing wool as lining material.

Do not wash garments inside out.

Rescue clothing*	60 °C	Load ratio/load size
Fabric	Nomex and cottons	
Programme sequence	Pre-wash up to 40 °C Disinfection* 60 °C, holding time 20 min 2 rinse cycles (optional disinfection rinse can be activated) Final spin	
Extras	Soak, Rinse plus	See "Emergency ser-
Rescue cloth. + proof	fing*/** 60 °C	vices clothing load
Fabric	Nomex and cottons	size" chart
Programme sequence	Pre-wash up to 40 °C Disinfection* 60 °C, holding time 20 min 2 rinse cycles Proofing bath** 40 °C Final spin	
Extras	Soak, Rinse plus	

<sup>\*</sup> The disinfection parameters for chemo-thermal disinfection (temperature, temperature holding time and dispensing quantities) must be set on site to suit detergents and disinfectants.

<sup>\*\*</sup> The proofing agent must be suited to the special requirements of this area of use.

If "Pre-wash" is selected, place the detergent directly in the drum. If necessary, the  $\sqcup$  and  $\sqcup$  compartments can be used to add detergent in the main wash cycle.

## **Emergency services clothing load size**

Model	Quantity
PWM 509	Approx. 3 suits
PWM 511	Approx. 3–4 suits

## Outerwear programme overview

Outerwear	40 °C (Cold to 40 °C)	Load ratio/Load size
Fabric	Polyamide and membrane items	
Programme sequence	Main wash up to 40 °C, wash time 6 min 2 rinse cycles Final spin	
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Wash/proofing	40 °C	
Fabric	Polyamide and membrane items	
Programme sequence	Main wash up to 40 °C, wash time 6 min 2 rinse cycles Proofing up to 40 °C Final spin	1:15 PWM 509 – 5.4 kg PWM 511 – 6.8 kg
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Rinse/proofing	40 °C	
Fabric	Polyamide and membrane items	
Programme sequence	1 rinse cycle Proofing 40 °C Final spin	
Extras	Rinse plus, Fill stop, Rinse hold	
Down jackets	40 °C (Cold to 60 °C)	
Fabric	Down-filled items	
Programme sequence	Main wash up to 60 °C, wash time 7 min 2 rinse cycles Final spin	1:25 PWM 509 – 3.2 kg PWM 511 – 4 kg
Extras	Pre-rinse, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	I WITTER

# Sport

Sportswear	40 °C (Cold to 60 °C)	Load ratio/Load size
Fabric	Shirts and trousers made from synthetic fibres or mixed fibres	
Programme sequence	Main wash up to 60 °C, wash time 6 min 2 rinse cycles Final spin	
Extras	Soak, Water plus, Intensive, Rinse plus, Add agent, Rinse hold	
Sport Microfibre	40 °C (Cold to 60 °C)	
Fabric	Polyester, polyamide	
Programme sequence	Main wash up to 60 °C, wash time 6 min 2 rinse cycles Final spin	1:20 PWM 509 – 4 kg PWM 511 – 5 kg
Extras	Soak, Water plus, Intensive, Rinse plus, Add agent, Rinse hold	
Trainers	40 °C (Cold to 60 °C)	
Fabric	Washable trainers (no leather shoes), shin pads, elbow protectors and similar items	
Programme sequence	Main cleaning up to 60 °C, wash time 6 min 2 rinse cycles Final spin	
Extras	Pre-rinse, Pre-wash, Soak, Water plus, Intensive, Rinse plus, Add agent, Rinse hold	

## Workwear

Oil/fat	60 °C (Cold to 90 °C)	Load ratio/Load size
Fabric	Cotton or mixed fibre workwear, table cloths or cleaning cloths soiled with oil or grease	
Programme sequence	Pre-wash up to 40 °C Main wash up to 90 °C, wash time 10 min Cool down can be selected as an option 3 rinse cycles Final spin	
Extras	Pre-rinse, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	1:10 PWM 509 – 8 kg PWM 511 – 10 kg
Dust/flour	60 °C (Cold to 90 °C)	
Fabric	Cotton or mixed fibre workwear, table cloths or cleaning cloths soiled with dust or flour	
Programme sequence	Pre-wash up to 40 °C Main wash up to 90 °C, wash time 10 min Cool down can be selected as an option 2 rinse cycles Final spin	
Extras	Pre-rinse, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

## Sluice programme overview (Healthcare HTM 01-04)

The sluice programmes are for extremely heavily soiled personal clothing, as well as heavily soiled towelling and bed linen.

Disinfection according to provisions of British National Health Service (GB). There are two different disinfection options: 65 °C for 10 min or 71 °C for 3 min.

Sluice low*	65 °C	Load ratio/Load size
Fabric	Heavily soiled personal clothing, towelling and bed linen	
Programme sequence	2 pre-rinse cycles Pre-wash 60 °C, 5 min Disinfection 65 °C, holding time 10 min Cool down can be selected as an option 3 rinse cycles Final spin	
Extras	Soak, Intensive, Rinse plus, Fill stop, Rinse hold	1:15 PWM 509 – 5.4 kg PWM 511 – 6.8 kg
Sluice high*	71 °C	
Fabric	Heavily soiled personal clothing, towelling and bed linen	
Programme sequence	2 pre-rinse cycles Pre-wash 60 °C, 5 min Disinfection 71 °C, holding time 3 min Cool down can be selected as an option 3 rinse cycles Final spin	
Extras	Soak, Intensive, Rinse plus, Fill stop, Rinse hold	

<sup>\*</sup> Only included in the DV (drain valve) model

## **Self Service**

Coloured items	60 °C (Cold to 60 °C)	Load ratio/Load size
Fabric	Normally soiled cotton, linen and mixed fibre fabrics, e.g. bed linen and towelling	
Programme sequence	Main wash up to 60 °C, wash time 8 min 2 rinse cycles Last rinse cycle hot* Final spin	
Extras	Pre-wash, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Colours int + pre-was	sh 60 °C (Cold to 60 °C)	1:9 PWM 511 – 11 kg
Fabric	Heavily soiled cotton, linen and mixed fibre fabrics, e.g. bed linen and towelling	- PWWISH-IIRG
Programme sequence	Pre-wash up to 30 °C Main wash up to 60 °C, wash time 13 min 2 rinse cycles Last rinse cycle hot* Final spin	
Extras	Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	

<sup>\*</sup> The standard programme **Coloured items 60 °C** is programmed for hot water rinse cycles. If hot water is available, we recommend using hot water for the final rinse cycle.

<sup>-</sup> There is less residual moisture in the laundry after spinning.

<sup>The laundry is already warmed.
This saves time and energy if the laundry is immediately either dried in a tumble dryer or ironed with an ironer.</sup> 

# Programme overview: ECO programmes

Colours Eco	40 °C (Cold to 40 °C)	Load ratio/load size
Fabric	Lightly soiled cotton, linen and mixed fibre fabrics, e.g. bed linen and towelling	
Programme sequence	Main wash up to 40 °C, wash time 11 min 2 rinse cycles Last rinse cycle cold Final spin	1:9 PWM 509 – 9 kg PWM 511 – 11 kg
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	
Colours Eco intensive	e 40 °C (Cold to 40 °C)	Load ratio/load size
Fabric	Normally soiled cotton, linen and mixed fibre fabrics, e.g. bed linen and towelling	
Programme sequence	Main wash up to 40 °C, wash time 26 min 2 rinse cycles Last rinse cycle cold	1:9 PWM 509 – 9 kg
	Final spin	PWM 511 – 11 kg

Minimum iron Eco	30 °C (Cold to 30 °C)	Load ratio/load size
Fabric	Lightly soiled synthetic and mixed fibre fabrics	
Programme sequence	Main wash up to 30 °C, wash time 7 min 2 rinse cycles Final spin	1:20 PWM 509 – 4 kg PWM 511 – 5 kg
Extras	Pre-wash, Soak, Water plus, Intensive, Rinse plus, Fill stop, Rinse hold	FWM SH - 5 kg
Minimum iron Eco intensive 30 °C (Cold to 30 °C)		Load ratio/load size
Falaria		
Fabric	Lightly soiled synthetic and mixed fibre fabrics	
Programme sequence	Lightly soiled synthetic and mixed fibre fabrics  Main wash up to 30 °C, wash time 22 min 2 rinse cycles Final spin	1:20 PWM 509 – 4 kg PWM 511 – 5 kg



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