

ISO 15797 and ISO 30023, testing details and qualification symbols for garments suitable for industrial laundering

Fabrics/garments from Nybo Workwear A/S are tested for suitability in industrial laundering using the test standard ISO 15797, an international test standard setting out conditions for testing workwear (laundry program, equipment, etc.). Symbols and conditions applied in ISO 15797 tests are specified in the qualification label standard ISO 30023 - see below.

Many of our products are also tested at 60° washing with the use of a chemical disinfectant as the procedure is in practice in many industrial laundries. Please also consult the section for washing instructions under “service” on our home page, including comments regarding tunnel drying.

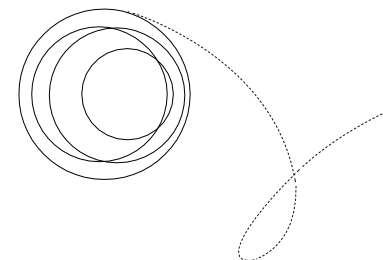
Chemicals used in these tests correspond to the ISO 15797 test detergents but for selected tests additional chemicals are applied - corresponding to the type of detergents used by industrial laundries such as e.g. softener and neutralizer = acetic acid.

In the tests the ISO 15797 process No. 5., 6. and 8. (washing processes, please see below chart - new numbering 2017) are used with tumble drying or tunnel/cabinet drying (finisher) followed by evaluation/qualification after 5 cycles (washing and drying as recommended by ETSA (European Textile Service Association)).

Selected products are tested “full scale” in an industrial laundry to compare with ISO 15797 tests to check influence from e.g. tunnel finishing.

Through such additional procedures Nybo Workwear A/S secure a more qualified range of suitable garments to meet customer needs - in particular for appearance and performance throughout the lifetime of the garments.

Further information and relations between the 2 standards can be found below:



Testing of fabrics/garments subject to ISO 15797 and design of qualification label according to ISO 30023.

The relevant washing process applied in tests is indicated by No. on black background. The red arrows shown below indicate which washing processes are used by Nybo Workwear A/S. An ISO 30023 label may show more than one washing process. If both drying processes are shown on label this indicate that both methods were applied in the tests for this garment.

Garments may be labelled with the text on care label with reference to ISO 15797 or with ISO 30023 label as shown below.

ISO 15797 procedures for washing - and relation to qualification label (ISO 30023)

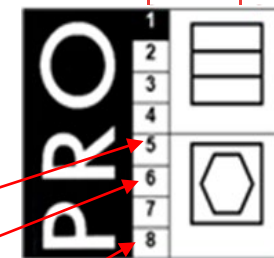
ISO 15797:2017 version = amended process numbering

*conversion of process Nos. - new to old

Classification	Textile type	Process no. *		Temperature
		2017	old	
White workwear and/or with coloured sensitive parts, bleaching with peracetic acid	cotton	1.1.	1	85°
	polyester / cotton	1.2.	2	75°
White workwear with chlorine bleaching	cotton	2.1.	3	85°
	polyester / cotton	2.2.	4	75°
White workwear and/or with coloured sensitive parts, bleaching with hydrogen peroxide	cotton	3.1.	5	85°
	polyester / cotton	3.2.	6	75°
Coloured workwear	cotton	4.1.	7	85°
	polyester / cotton	4.2.	8	75°

ISO 30023 symbols for label

Process.No.	Drying method
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Nybo Workwear A/S
Washing 85° and 75°

Both tunnel drying
and tumbler drying

ISO 15797 procedures for drying

Drying method A	Industrial tumbler, **outlet temperature	Max. 90°
Drying method B	Tunnel dryer = finisher (steamer) Inlet temperature (max. depending on fiber/fabric type)	ca. 155°



Tumbler symbol



Finisher symbol

****NB! Drying in domestic tumbler differ in temperature, outlet temperature max. ca. 60° !!!!!**

