

Mositure in Textiles

% Regain = $\frac{\text{Weight of water in the sample} \times 100}{\text{Oven dry weight of the sample}}$

% Moisture = $\frac{\text{Weight of water in the sample} \times 100}{\text{Original total weight of the sample}}$

Conversions between Moisture Content & Regain

To convert from moisture content to regain or vice versa, use the following equations (in which M=moisture content, and R = regain):

$$M = \frac{100R}{100 + R} \quad \text{and} \quad R = \frac{100M}{100 - M}$$

Conventional recovery rate to be used in connection with the analysis of fibre mixtures as given in Annex II of the EEC Directive on textile descriptions.

Fibres	Percentages	Fibres	Percentages	Fibres	Percentages
Wool and hair:		Jute	17.00	Acrylic	2.00
combed fibres	18.25	Abaca	14.00	Chlorofibre	2.00
carded fibres	17.00	Alfa	14.00	Fluorofibre	0.00
Fur:		Coir	13.00	Modacrylic	2.00
combed fibres	18.25	Genista	14.00	Polyamide 6.6: discontinuous fibre continuous filament	6.25 5.75
carded fibres	17.00	Kenaf	17.00		
Hair:		Ramie		Polyamide 6: discontinuous fibre continuous filament	6.25 5.75
combed fibres	16.00	[white fibre]	8.50		
carded fibres	15.00	Sisal	14.00	Polyamide 11: discontinuous fibre continuous filament	3.50 3.50
Silk	11.00	Acetate	9.00		
Cotton:		Alginate	20.00	Polyester: discontinuous fibre continuous filament	1.50 3.00
normal fibres	8.50	Cupro	13.00		
mercerized fibres	10.50	Modal	13.00		
Kapok	10.90	Proteinic	17.00		
Linen	12.00	Triacetate	7.00		
Hemp	12.00	Viscose	13.00		

Fibres	Percentages	Fibres	Percentages	Fibres	Percentages
Polyethylene	1.50	Trivinyll	3.00	[continuous filament of a diameter equal to or less than 5 µm]	3.00
Polypropylene	2.00	Elastodiene	1.00		
Polycarbamide	2.00	Elasthane	1.50		
Polyurethane:		Textile glass:		Metal fibre	2.00
discontinuous fibre	3.50	[continuous filament of a diameter greater than 5 µm]	2.00	Metalized fibre	2.00
continuous filament	3.00			Asbestos	2.00
Vinylal	5.00			Paper thread	13.75

* In the EEC Directive the following definitions are given:

- Wool**. Fibre of sheep's fleece
- alpaca, llama, camel, cashmere, mohair, angora, vicuna, yak, guanaco**, preceded or not by the word 'wool' or 'hair'. Hair of the following animals: alpaca, llama, camel, cashmere goat, mohair, angora rabbit, vicuna, yak, guanaco.
- fur or hair** with or without an indication of the animal species [for example, bovine hair, goat's hair, horse hair]. Hair of various animals other than those mentioned under 1 & 2.