Breathability of Lejon Kemi CPC Impregnating agent

Determination of water vapour permeability according to DIN EN ISO 15496.

Products:

a) Untreated fabric
b) Concentrated Lejon Kemi SPC impregnating agent
c) Commercial softener “Kuschelweich”

Fabric: Outdoor jacket fabric with membrane

Procedure: Washing machine (laboratory simulation)

Dosage: 12.5 % with reference on fabric weight (dry) Liquor ratio 1:15
Drying: Clothesline at room temperature
Tests: Resistance to water vapour and water vapour permeability

Result

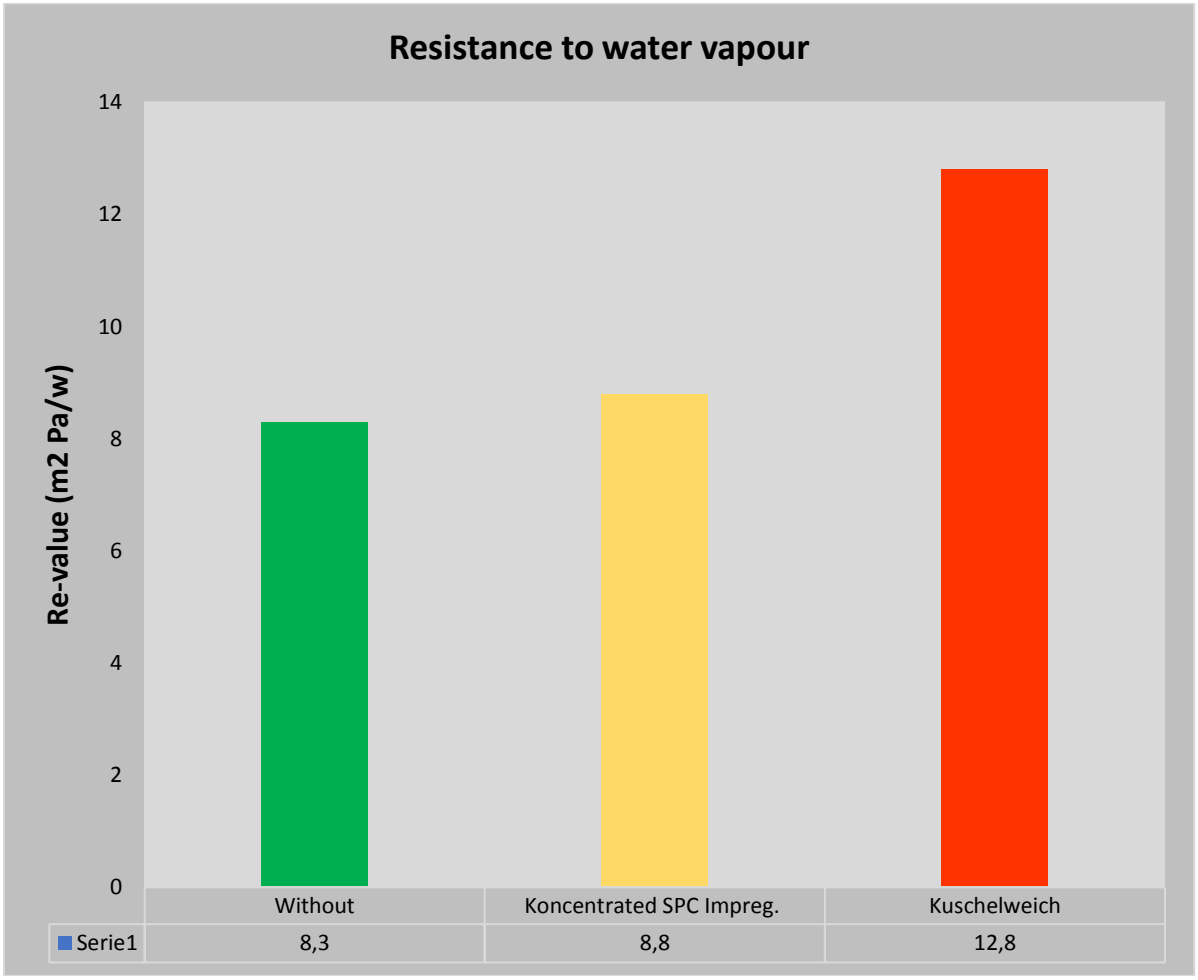

Diagram No 1. Resistance to water vapour. RE-value (m2 Pa/W)

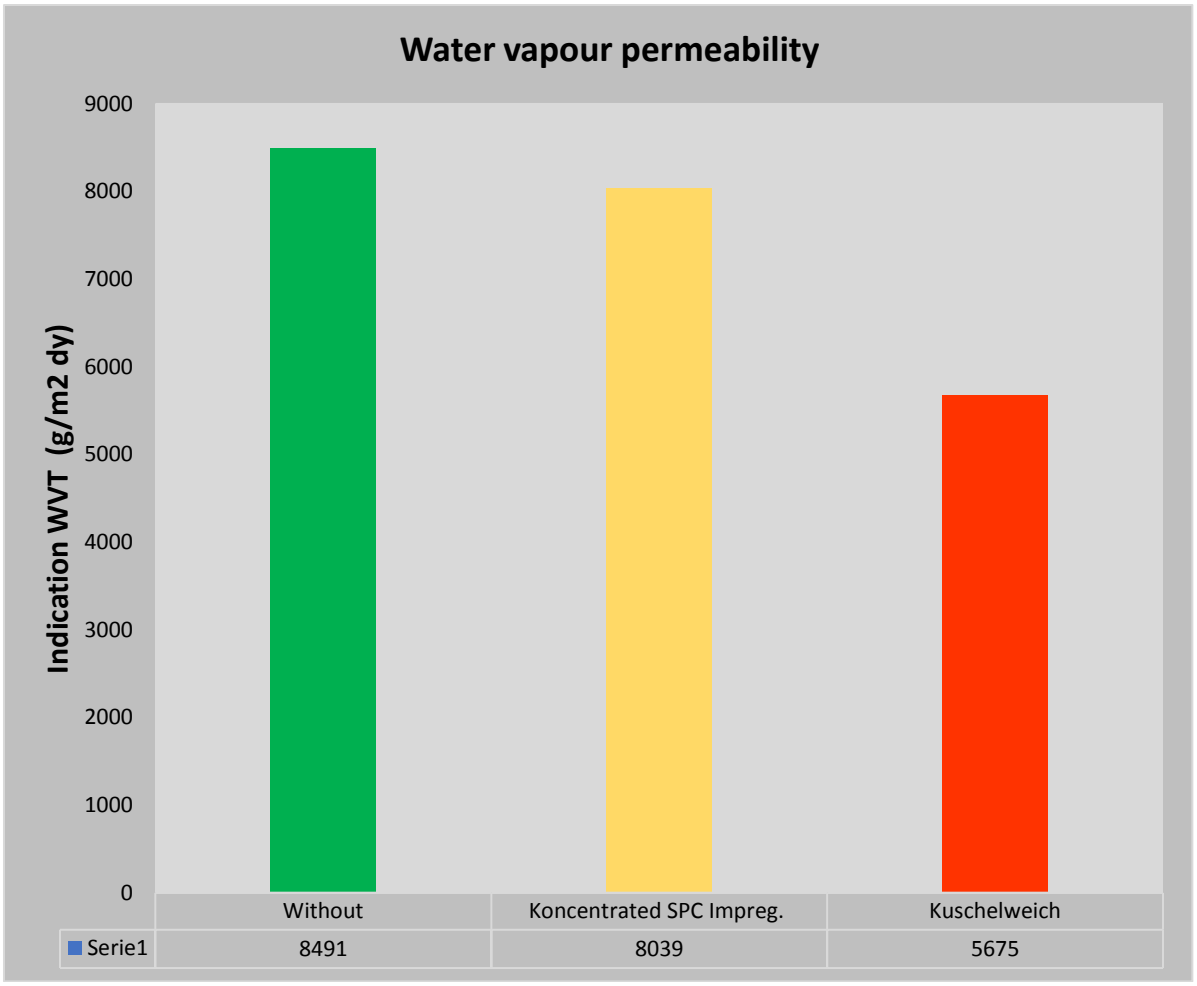

Diagram No 2. Water vapour permeability (Indication WVT g/m2 dy)

Summary

Lejon Kemi SPC Impregnating agent does not have any significant influence on the breathability of membrane fabric. In comparison to a classical softener, in test here with ”Kuschelweich“, which shows a deterioration of breathability. The reason is that the active substance of a classical softener, a cationic surfactant on basis of a fatty acid ester quat, deposits at the surface of the fabric and makes a “coat” on it. A substance based on silicone in form of a micro emulsion or solution, like Lejon Kemi SPC Impregnating agent, migrates into the fabric and does not produce any coating on the fabrics.

Note! Follow instructions for dosage and use on product label for SPC Impregnating agent.

Lejon Kemi AB. 2018-03-25.