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| **Demo of how to check for proper pectin removal** |  |
| Demonstration of how simple it is to perform a pectin removal test in less than 15 minutes… |  |
| Enzymatic scouring is a pre-treatment of cotton fabric to enable an even dyeing result |  |
| The result of the pre-treatment is invisible to the naked eye, so how do you know if it works? |  |
| A simple test can give you the answer… |  |
| First a bit of science |  |
| A wax-free fabric has the best and most even dye uptake |  |
| Cotton cell walls contain pectin that acts like a glue, binding the wax to the fiber |  |
| Enzymes break down pectin, which releases the wax |  |
| Here is a method to test if the pectin is removed efficiently |  |
| We perform the test on 4 different samples |  |
| Untreated fabric |  |
| Treated with Novozymes’ scouring enzymes |  |
| Treated with wetting agent |  |
| Alkaline boiling incl. wetting agent |  |
| Reagent (A) |  |
| Soak the samples for 10 minutes in a reagent (A) which will be absorbed by the pectin on fabric |  |
| Take the samples out of reagent (A) and rinse them thoroughly in water |  |
| Dry in paper towels |  |
| Reagent (B) |  |
| Place the samples in a container with a reagent (B) which reacts with the absorbed reagent (A) |  |
| Take the samples out of reagent (B) and rinse them thoroughly in water and dry them in paper towels |  |
| Read off the result within 1 minute – the effect will fade hereafter |  |
| The intensity of brown reflects how much residual pectin is left B: Treat with Novozymes’ souring enzymes D: Alkaline boiling incl. wetting agent |  |
| The colors show that the sample treated with enzymes has the **same** or **better** pectin removal as the sample treated with the alkaline boil |  |
| **Regional-launch-of-bioprep-fusion-for-the-textile-1** |  |
| BioPrep Fusion for enzymatic scouring of cotton knits |  |
| BioPrep Fusion |  |
| 3 Baths reduced to 1- and at lower temperatures  Temperature  Conventional scouring  Time  Souring with enzymes |  |
| Significant drop in water consumption – up to 67%  Water use m3  Alkaline scouring +bleach  BioPrep Fusion  Reduce chemical heavy effluent |  |
| Save half the time and utilize capacity  Hours  Alkaline scouring +bleach  BioPrep Fusion |  |
| More than 50% of savings in steam and electricity  Steam/ton  Alkaline scouring +bleach  BioPrep Fusion  Electricity, Kwh/ton  An optimal composition in one complete product  Instant absorbency  Even dyeing  Convenient 1 bath process  Sustainability and cost savings  Wider recipe use |  |
| Are you ready to give BioPrep Fusion a try? |  |