DIPARTIMENTO DI CHIMICA INDUSTRIALE "TOSO MONTANARI"
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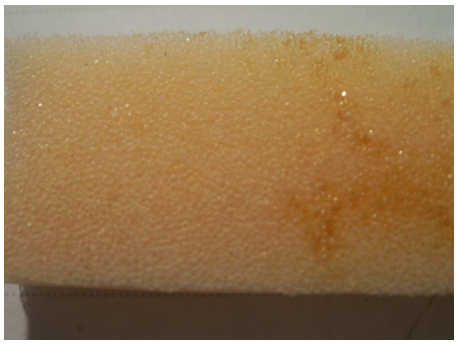
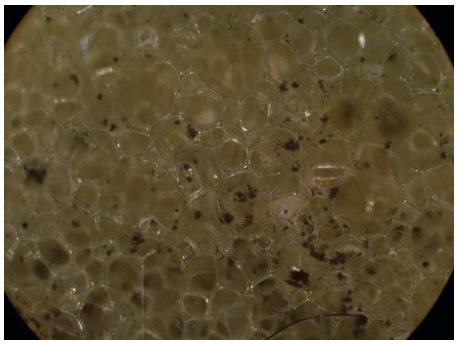
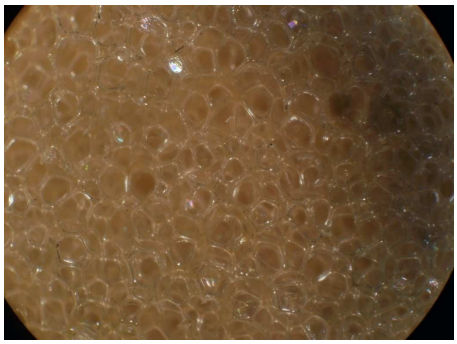
Mold growth test

We have conducted some mold growth tests on samples of Conventional Polyurethane Foam and DryFlex® Polyurethane provided by Pelma, by inoculating the samples with a few ml of a solution of orange juice containing spores of Penicillium digitatum and Ryzopus stolonifer. The samples were then placed in a humidity chamber (90% RH) at 37 ° C for 6 days. In the following left photo (Expanded Conventional Polyurethane) the typical flaky mold of R. stolonifer can be observed, with long sporangiophore branches; in the right image (DryFlex® Polyurethane) only the traces left by the dried colorful orange juice can be seen on the sample surface.



With the optical microscope (20X), conidia of Penicillium within the pores of the Conventional Polyurethane Foam are clearly visible (photo below left); in the right image (DryFlex® Polyurethane) the images before and after inoculation and subsequent incubation are identical, demonstrating that the mold does not proliferates.





In conclusion, the samples of Conventional Polyurethane Foam gave mold growth while the samples of DryFlex® Polyurethane disclosed no infestation.

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