

TEHOFUN CDTI R&D PROJECT



Francisco Jover S.A. is developing the R&D project "TEHOFUN" to functionalize the home textiles produced by the company. The aim is increase added value of products and provide them new functionalities: Soil-release, Fire retardant and electromagnetic shielding. The project is funded by CDTI.

The project is divided in:

Development of fire-retardant upholstery with soil release properties.

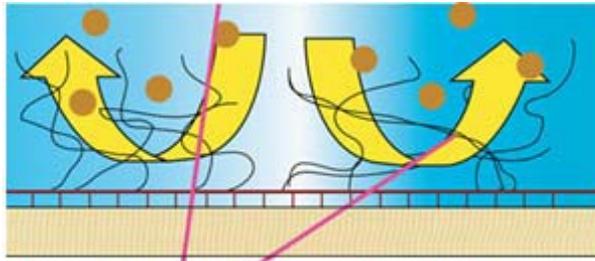
Is desirable that upholstery in public spaces have anti-stain treatments or that facilitate their cleaning. Taking into account that in most cases, due the regulations in force, the fabrics used are fire-retardant, and there are incompatibilities with fluorocarbons products (anti-stain) and fire retardant treatment, due the decreasing of the fire retardant properties, the alternative solution is to add soil release treatments which facilitates the cleaning of the textile product.

For them fluorocarbon-free products are used, which not form a film on the fiber preventing the stain penetrating into fabric, but rather provides a high hydrophilic to fabric, so that it "absorbs" the stain, without allowing it to adhere to fabric, and is expulsed of inside when it comes in contact with water.

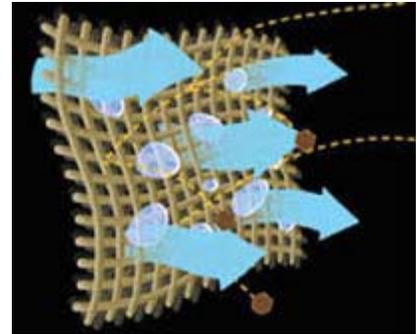


Simulación acabado repelente y acabado soil reléase.

Soil release products are commonly confused with repellent products, but there is a great difference, while the second prevent fabric to be soiled, the first facilitate the removal of stains doing the fabrics more hydrophilic, which allows wash liquid to enter easily and dissolve the stain.



Liberación de las manchas durante el lavado



Simulation of soil release effect.

Advantages respect conventional treatments:

- Fluorocarbon free in their formulation (possible harmful/carcinogenic; residues/ restrictive legislation)
- Antistatic, hydrophilizant and softener.
- Easy removal of stain.
- Permanent treatment, kept after washing.
- Compatible with fire retardant properties.
- Wide variety of fabrics available.

Development of home textile (upholstery, curtains, bedding) with electromagnetic shielding

- Home textile, bedding, and curtains with EMI shielding generated by electric lines, wireless mobile telephones or appliances, etc. These radiations can produce many effect on health: Sleep problems, stress... with accumulative effects.



- Curtains with frequency inhibiting properties: to avoid the use of mobile telephones in rooms not allowed, such as meeting rooms, conferences , cinemas, theater,...

