

Not only natural...

More recently, it has become clear that Italian manufacturer Aquafil is walking the same road, but in this case flying the flag for synthetic fibres. Its Dryarn product, a wholly synthetic polypropylene microfibre, recently won the right to call itself 'skin-friendly' after an exhaustive scientific study and Aquafil is claiming that Dryarn is the first man-made fibre to achieve this.

Skin specialists at the University of Modena carried out an extensive set of analyses on Dryarn. The tests took place over a period of 12 months and in three phases. In the first, small samples (patches of around two square-centimetres) of 18 individual substances, including dyes and chemicals, that Aquafil uses in the construction of the fibre were placed in direct contact with the skin of 200 men and women with no history of skin problems. The clinicians satisfied themselves that none of these components was likely to cause irritation to healthy skin.

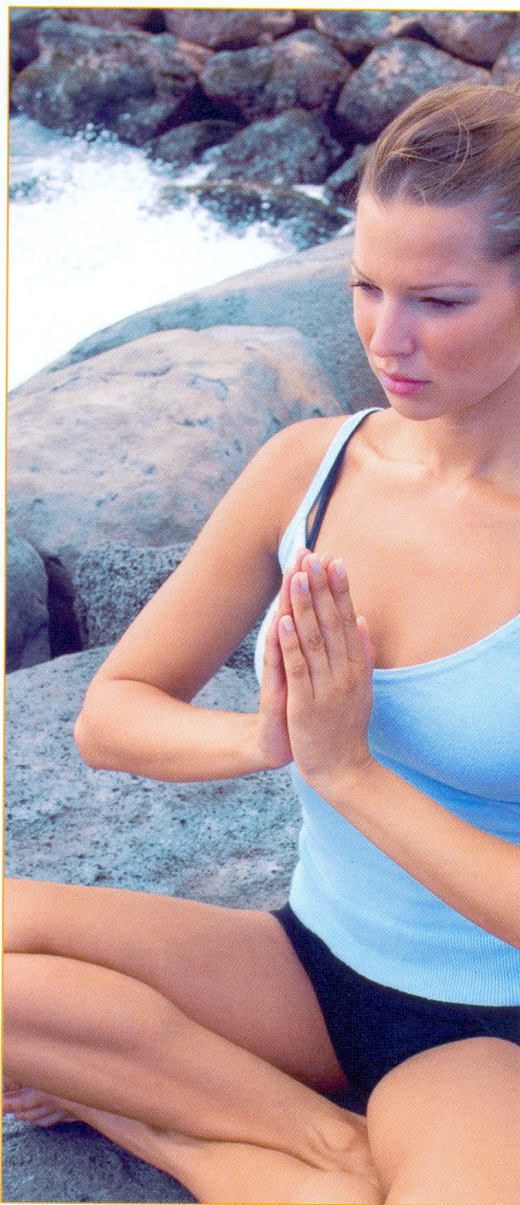
Next, they applied similar-sized samples of Dryarn itself, to see if problems, that failed to materialise when the component parts were in isolation, might appear as a result of putting them into the finished fibre together. Again, the tests showed no damage to subjects' skin.

At this point, the team from Modena turned its attention to people who were suffering from skin complaints and asked them to take part in a trial of finished garments made from Dryarn. All of the people who took part were adults, suffering from complaints such as erythema (redness and irritation that occur in reaction to some medicines, and sometimes to hair-removal treatments) and xerosis (dry skin).

They each received a supply of sleeveless, long-sleeved and short-sleeved tops to wear during the day, and pyjamas to put on at night—all made from Dryarn—with sufficient changes for them to wear the samples non-stop for one month. It is this third phase of the study that came to an end recently and it's fair to say that Aquafil is excited by the results. All of the patients who took part gave a positive response with regard to comfort and a medical team from the university confirmed that examinations at the end of the trial showed considerable improvement in their skin conditions.

Aquafil's marketing and communications manager, Nathalie de Marco, says plans are in place now for partner organisations to make baby-vests specifically for infants with dermatological problems and that other healthcare applications of Dryarn, based on the findings of the study, are certain to follow. And one advantage she feels users of garments made with her company's fibre will have is that a whole range of colours will be open to them, instead of only the off-white of unbleached cotton and

other natural fibres that many skin-ailment sufferers have had to limit themselves. Dryarn is coloured at source as part of the manufacturing process. All the dyes Aquafil uses at present featured in the Modena study and passed—with flying colours.



Fabric manufacturer, Nilit, consider health and wellbeing issues when applying polymer functionality.

 Nilit