

Read the text from 2013 about a fabric that can be sprayed onto your body. Complete the sentences (1-8) using a maximum of 4 words. Write your answers in the spaces provided on the answer sheet. The first one (0) has been done for you.

Spray-on clothing becomes a reality

A seamless fabric that can be sprayed on to skin and other surfaces to make clothes, medical bandages and even upholstery was demonstrated to great success at the recent Science in Style fashion show at Imperial College London.

The seamless material is called Fabrican Spray-on, a fabric that can be sprayed directly onto the body, using aerosol technology. The spray dries instantly to make innovative clothes that can be washed and re-worn.

The development is the work of Dr Manel Torres, a fashion designer from Spain and an academic visitor at Imperial College, who collaborated with Paul Luckham, Professor of Particle Technology from the Department of Chemical Engineering.

Dr Torres demonstrated the new material on models, creating clothes from zero to show how the technology can be applied in the fashion industry.

He showcased his 2011 spring/summer collection of spray-on *haute couture* at the fashion show at the college. The event celebrated design-led technology at Imperial and coincided with London Fashion Week and the London Design Festival.

Fabrican Spray-on Fabric consists of short fibres that are combined with polymers to bind the fibres together, and a solvent that delivers the fabric in liquid form and evaporates when the spray reaches a surface.

The spray can be applied using a high-pressure spray gun or an aerosol can. The texture of the fabric can be changed according to what fibres are used – such as wool, linen or acrylic – and how the spray is layered.

Fabrican (www.fabricanltd.com) is a patented, instant, sprayable, non-woven fabric developed through a collaboration between Imperial College and the Royal College of Art.

The technology has captured the imagination of designers, industry and the public around the world and has been developed for use in household, industrial, personal and healthcare, decorative and fashion applications using aerosol cans or spray-guns.

"When I first began this project I really wanted to make a futuristic, seamless, quick and comfortable material," said Dr Torres.

"In my quest to produce this kind of fabric, I ended up returning to the principles of the earliest textiles – such as felt – which were also produced by taking fibres and finding a way of binding them together without having to weave or stitch them."

"As an artist I spend my time dreaming up one-off creations, but as a scientist I have to focus on making things reproducible. I want to show how science and technology can help designers come up with new materials," added Dr Torres.

Fashion apparel is just one of the uses of this technology. Dr Torres has set up the spin-out company Fabrican with Professor Luckham to explore other applications, such as medicine patches and bandages, hygiene wipes, air fresheners and upholstery for furniture and cars.

Professor Luckham added: "The fashion application of spray-on fabric is a great way of advertising the concept, but we are also keen to work on new applications for the medical, transport and chemical industries."

"For example, the spray-on fabric may be produced and kept in a sterilised can which could be perfect for providing spray-on bandages without applying any pressure for soothing burnt skin, or delivering medicines directly to a wound."

0	The method of applying the material involves ____.
1	Instead of creating the spray on his own, Dr Torres ____.
2	Dr Torres illustrated the use of the spray in fashion by ____. (Give <u>one</u> answer.)
3	The show was meant to ____.
4	The fluid part disappears as soon as it ____.
5	Different materials can be produced depending on ____. (Give <u>one</u> answer.)
6	To create the spray, Dr Torres went back to ____.
7	Being a researcher, Dr Torres must concentrate on ____.
8	Using the spray for clothing helps to ____.

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0	<i>using aerosol technology</i>
1	
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3	
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Von der
Lehrperson
auszufüllen

richtig falsch