



Alexium International Group Limited  
ABN: 91 064 820 408

ASX: AJX

ASX/MEDIA RELEASE

22 OCTOBER 2013

## **FIRE RETARDANT (FR) TREATMENT ON POLYESTER-COTTON BLENDS ACHIEVES KEY DEVELOPMENT MILESTONES**

- **New FR treatment successfully demonstrated on polyester-cotton fabrics**
- **Achieves key performance threshold for flame retardancy and wash durability**
- **Opens multi million dollar opportunities in the furniture textile market, transportation, apparel, and other technical textile market**
- **Separate trade name to follow with formal product launch November 2013**

Perth, WA and Greer, South Carolina, Alexium International Group Limited (Alexium) (ASX:AJX, AX:AJX, OTC QX:AXXIY) announced today that it has successfully achieved key technical milestones for introducing a new flame retardant treatment for polyester-cotton blends to the market. Alexium is now introducing samples for customer evaluations and preparing for formal product launch in November 2013.

The newest FR treatment, targeting polyester-cotton blends, has been successfully demonstrated - providing durable FR protection for common fabric blends with up to 65% polyester content. Alexium's treatment, applied to an initial set of polyester cotton blends, provides a no melt, no drip, and excellent vertical flame test performance – even after 50 wash/dry laundering cycles. This work was performance in Alexium's development laboratory and validated in a production trial at North Carolina State University.

“We have now successfully applied our treatment to fabric blends from 25% up to 65% polyester content. The positive technical performance data captured in such a short time period is very encouraging and suggests the potential for a very wide range of fabric applications,” stated Dr. Bob Brookins, Alexium's Head of Research and Development.

Polyester is used extensively in defense sector fabrics particularly in Europe, industrial work wear, upholstery, furniture, and the transportation industry; approximately 192 million bales of polyester were sold worldwide in 2012. In fact, growing at an annual rate of over 5% each year over the last decade, polyester has now surpassed the cotton market in market volume. The annual global polyester fiber market is now well over USD \$33 billion.

“We have begun sending out treated samples for evaluations and testing by the market, with the objective of identifying earliest commercial opportunities and product sales opportunities.

We are not aware of any treatment solution in industry that can provide comparable performance and deliver it at such low cost,” added Stefan Susta Alexium’s Chief Operating Officer.

The FR treatment in the lucrative polyester-cotton market segment will be marketed under a separate trade name, to be launched in the coming month as part of a formal product launch. This announcement follows recent news on Alexium’s two other FR treatments proceeding to further production trials and early market introductions: Ascalon™ for nylon, and Nycolon™ for nylon-cotton blends.

For more information visit: [www.alexiuminternational.com](http://www.alexiuminternational.com)

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#### **About Alexium**

Alexium International Group Limited (ASX:AJX, AX:AJX OTC QX:AXXIY) holds proprietary patent applications for a process developed initially by the US Department of Defense , which allows for the surface modification and attachment of nano-particles or multiple chemical functional groups to surfaces or substrates to provide functions such as water proofing, oil proofing, anti-microbial, non-stick and UV protection. Applications under development include but are not limited to textiles, paints, packaging, glass and building materials. Alexium’s fire retardant treatment for 95% Nylon based products is marketed under the Ascalon™ trademark. Alexium’s fire retardant treatment for nylon blended materials such as nylon/cotton (Nyco), is marketed under the Nycolon™ trade mark.