



## Embrace Fresh.

**Science and innovation combine to create SILVADUR™ technology, the intelligent antimicrobial that keeps textiles fresh and odor-free.**

SILVADUR™ unites silver's elemental powers with a patented delivery system to create an extremely effective, highly durable antimicrobial for a wide variety of textile and apparel applications.

SILVADUR's patented polymer-containing silver technology delivers silver ions to fabric surfaces and activates them in the presence of undesirable bacteria. This bio-responsive performance feature ensures that SILVADUR stays on the fabric and remains active for more than 50 washings. Also, SILVADUR won't detach or degrade at high temperatures or in the presence of bleach and won't discolor fabrics.

**Finally, there's an antimicrobial that can stand up to real life.**



### **Sustainability Corner**

**SILVADUR™ is retained longer on fabric substrates. End result? A longer garment 'working life'.**

**Our smart release mechanism releases silver only when it's needed, ensuring that more active remains bound to the surface for longer-term antimicrobial activity. Garment turnover, and silver released into the environment, are reduced.**

**The enhanced freshness that SILVADUR provides means fewer washings, a benefit to the consumer and the environment.**

*Visit [www.dow.com/sustainability](http://www.dow.com/sustainability) for more about Dow's commitment to sustainability in hygiene.*

## Features and Benefits

- + SILVADUR™ is a liquid formulation which is easy to apply in the textile manufacturing process and is compatible with many fibers, fabrics, and other additives. Efficient application means that cost-to-treat can be significantly lower.
- + SILVADUR is efficient against bacteria and fungi which cause odors, discoloration or deterioration of textiles.
- + SILVADUR is registered with the US EPA (EPA Reg. No. 707-313.) and its active ingredient is notified and supported under the EU BPD.
- + SILVADUR product line is approved as non-toxic by the International Oeko-Tex® Association.

### SILVADUR™ Durability

	% Reduction of <i>Escherichia coli</i>	
	Unwashed	Washed 50x
100% Cotton Tee Shirt	99.99%	>99.0%
50/50 Polyester/Cotton	99.99%	>99.5%

SILVADUR treated fabrics were tested vs. a control (untreated) fabric and measured for overall reduction in bacteria.

Fabrics were tested using ISO 20743 Test Method with *Escherichia coli* (ATCC 25922).

Tests independently performed by the International Antimicrobial Council.

### 100% Cotton Socks

Test Organisms	D (inhibition zone)	Requirement on D	% reduction after 50 washing cycles	AAA Requirement on % reduction
<i>Escherichia coli</i> ATCC 8099	0mm	≤5mm	>99	≥70
<i>Staphylococcus aureus</i> ATCC 6538	0mm	≤5mm	>99	≥80
<i>Candida albicans</i> ATCC 10231	0mm	≤5mm	>99	≥60

TEST METHOD(S): AATCC147

Washing method: FZ/T 73023-2006 Antibacterial knitwear, appendix C.3

Safety requirement (D): FZ/T 73023-2006 Antibacterial knitwear, appendix E

Antimicrobial activity test: FZ/T 73023-2006 Antibacterial knitwear, appendix D.

[www.silvadur.com](http://www.silvadur.com) | [www.dowmicrobialcontrol.com](http://www.dowmicrobialcontrol.com)

©Copyright 2012 The Dow Chemical Company.

NOTICE: No freedom from any patent owned by Seller or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Seller assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

Please note that not all products are registered in all regions for all applications. Please contact your local Dow representative for detailed technical information applicable to your individual situation.

**USE BIOCIDES SAFELY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE.**

®™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

Form Number: 253-03047-08/07/12-BR

