DOW CORNING

We help you invent the future.™

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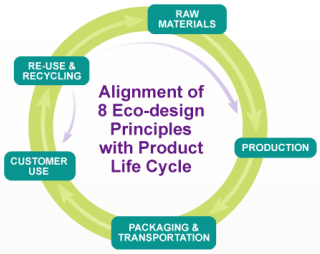
Showcasing Eco-Innovation

Textile Technology Saves Time and Energy



PRODUCTION

1. Minimize waste and consumables
2. Use renewable and reclaimed external feed stocks
3. Increase energy efficiency and reduce greenhouse gas emissions
4. Design less toxic and environmentally safer products and processes

PACKING AND TRANSPORTATION

5. Optimize packaging and transportation logistics to minimize energy and materials requirements and reduce potential for accidents

CUSTOMER USE

6. Enable use of renewable energy and raw materials
7. Enable resource conservation by customers and end-use consumers

RE-USE & RECYCLING

8. Create value from waste

Eco innovation blends Dow Corning's passion for innovation with one of our corporate values - sustainable development. It's an approach that brings together our focus on meeting our customers' needs for new environmentally compatible products and processes with our commitment to responsible management of resources.

We're using our eco-innovation model and principles to help conserve precious natural resources; rescue waste and increase use of renewable energy materials. This case study shows you how we are bringing our sustainability value to life.

Brief Description

Today's customers enjoy denim products – jeans, shirts, jackets and other clothing – that are soft and comfortable the day they are purchased. In response to this market demand, denim manufacturers put their products through a rigorous finishing process that requires time, energy – and a lot of water.

Dow Corning, along with a finishing solutions provider in India, has introduced new technology that reduces the number of steps required in the finishing process. The new product, DOW CORNING® GP8000 Eco-Softener, is a granular form of silicone that adds softness during the pre-wash process, saving water and energy.

Eco-Innovation – A Closer Look

The granular textile enhancer was developed in collaboration with Resil Chemicals Pvt. in India. Dow Corning considered a number of factors in creating this new product, including the need to:

- Eliminate solvent and biocide use
- Save water in the denim garment finishing process
- Improve transportation efficiency
- Increase productivity

The new, environmentally friendly solution delivers substantial water and energy savings by reducing the number of steps in the finishing process. Dow Corning estimates that use of the granulation product can cut water consumption by 30 to 50 percent (up to 15 liters per jean). This product is also compatible with the stone-washing process, which gives garments the popular faded look.

Knowing that the India market alone produces about 50 million pieces of denim clothing each year, this granular silicone is expected to have a significant positive impact on the environment. The technology is being introduced to the rest of the world to broaden the benefits.

Alignment with Eco-Design Principles

Principle 5 – Optimize packaging and transportation logistics to minimize energy and materials requirements and reduce potential for accidents

Principle 7 – Enable resource conservation by customers and end-use consumers

Health, Environmental & Social Benefits

- DOW CORNING® GP8000 Eco-Softener saves water and energy by reducing the number of steps needed in the denim garment finishing process.
- Local mills can incorporate the process to increase efficiency and productivity.
- Global denim manufacturers can proudly attach "green" tags to their products, indicating their concern for the environment.
- The granular product promotes ease of handling in transportation and batch processes.

Value Relating to the Eco-Sustainable Attributes

Dow Corning, through its collaboration with Resil Chemicals Pvt., is meeting the needs of end consumers and manufacturers with an improved process for denim finishing. At the same time, Dow Corning is meeting the global need to save water in manufacturing processes. Increasing interest in this new technology will ultimately lead to more widespread availability of softer, "greener" denim garments at a lower cost to the environment.

Learn More

To learn more about sustainability in action at Dow Corning, visit http://www.dowcorning.com/content/about/sustainability.aspx