



October 21, 2013

Ashland's Integra™ 44 microbiocide is Ecocert-certified for natural detergents

WILMINGTON, DE - Ashland Specialty Ingredients, a commercial unit of Ashland Inc. (NYSE: ASH), today announced Ecocert, the global certifying body for sustainable products, has verified that Integra™ 44 microbiocide conforms to its standards for use in natural laundry detergents. Integra 44 microbiocide offers broad-spectrum antimicrobial protection in a range of consumer and industrial liquid cleaning formulations. The microbiocide formed from glycine may be used by manufacturers seeking to obtain a natural cleaning product label designation.

"As consumers and retailers increasingly demand more natural cleaning solutions, Integra 44 microbiocide's certification provides formulators a technology that supports this trend while maintaining end product integrity," said Michael Standish, innovation manager, Home Care, Ashland Specialty Ingredients. "Certification offers cleaning product manufacturers assurance that they meet the 'natural' standards of this well-respected global organization."

To qualify as an Ecocert "natural detergent," a product must not have more than five percent synthetic content. Certification by the organization indicates that Integra 44 microbiocide enables detergent manufacturers to more easily meet Ecocert's requirement.

Nature-friendly biocide

Integra 44 microbiocide (EPA registration number 57978-4) is a fast-acting liquid biocide effective in a wide range of formulations and pH values. Easy to use and safe to handle, Integra 44 microbiocide is a manufacturing-friendly (broad compatibility with other ingredients, easy to handle) and now an Ecocert-verified choice for preserving liquid detergents in any marketplace.

Moreover, it has been demonstrated to be highly effective against gram-positive and gram-negative bacteria and fungi at low use levels. Biocide challenge studies showed that it is effective on organisms such as *S. aureus*, *E. aerogenes*, *P. vulgaris*, *P. putida*, *P. fluorescens*, *C. albicans* and *A. niger*. In detergent, hand soap and fabric softener formulations, Integra 44 microbiocide passed the 30-day challenge test at a low level of 0.20 percent.

Major retailers recognize natural choices

Most recently, leading retailers outlined directives that favor sustainable chemistry - ingredients that provide similar product performance to classic chemistry but are deemed less onerous to consumers and the environment.

About Ashland Specialty Ingredients

Ashland Specialty Ingredients offers industry-leading products, technologies and resources for solving formulation and product performance challenges in key markets including personal care, pharmaceutical, food and beverage, coatings and energy. Using natural, synthetic and semi-synthetic polymers derived from plant and seed extract, cellulose ethers and vinyl pyrrolidones, Ashland Specialty Ingredients offers comprehensive and innovative solutions for today's demanding consumer and industrial applications.

About Ashland

In more than 100 countries, the people of Ashland Inc. (NYSE: ASH) provide the specialty chemicals, technologies and insights to help customers create new and improved products for today and sustainable solutions for tomorrow. Our chemistry is at work every day in a wide variety of markets and applications, including architectural coatings, automotive, construction, energy, food and beverage, personal care, pharmaceutical, tissue and towel, and water treatment. Visit ashland.com to see the innovations we offer through our four commercial units - Ashland Specialty Ingredients, Ashland Water Technologies, Ashland Performance Materials and Ashland Consumer Markets.

FOR FURTHER INFORMATION:

Amanda Rosete
Ashland Specialty Ingredients
+1 (908) 243-3547
arosete@ashland.com