



News Release

Ashland launches organic and bright white, titanium dioxide-free coatings, an organic binder, and a one-step multi-functional binder-disintegrant at SupplySide West

Solutions demonstrate synergies resulting from Ashland's acquisition of Pharmachem

WILMINGTON, Delaware, November 5, 2018 – As health-conscious consumers aspire to live healthier lives they carefully consider their diets, exercise more frequently, and increasingly search for products that are higher in quality, more convenient, and demonstrate sustainable and socially responsible practices.

In May 2017, with the completion of the acquisition of Pharmachem, Ashland forged a global health and wellness business aimed at answering complex challenges for nutraceutical manufacturers and the self-directed consumer. Today, Ashland unveiled three new innovative market-changing technologies and transformative solutions for the nutraceuticals industry that will be showcased during the SupplySide West trade show, November 9-10, 2018 in Las Vegas, Nevada, booth 4963.

These transformative solutions are designed to respond to consumers' desires to manage a healthy lifestyle. They are also intended to refine the usability while potentially increasing the profitability for manufacturers.

1. Organic inside and out

Ashland introduced a new Aquarius™ organic film coating system and NutraPress™ organic tablet binder for dietary supplements. The coating and binder are made with organic, non-allergenic ingredients and are label-friendly. The new coating is an aqueous based alternative to animal-derived, shellac-based systems, providing exceptional gloss and improved slip for packaging while preventing dusting. Ashland has a proprietary process for the new organic binder that ensures good binding performance, powder flow and disintegration and helps customers seeking to meet organic label claims.

2. Bright white coatings without TiO₂

Ashland's new Aquarius™ Nutra TF titanium dioxide-free, pigmented tablet coatings are a solution for customers concerned about using titanium dioxide as an ingredient. The coatings demonstrate good brightness comparable to traditional white film coatings for oral solid dosage forms. Providing convenience, the coatings are fully formulated and provide immediate release. This new aqueous film coating system was created specifically for nutritional and dietary supplement products.

3. Like magic: a one-step binder plus disintegrant for tablets

Ashland also introduced the new Klucel Nutra™ PLUS, an all-in-one binder-disintegrant excipient to simplify the direct compression of tablets. The new product's improved powder flow ensures consistent performance during commercial scale manufacturing, refines usability and may reduce customers' operating costs. Klucel Nutra™ PLUS binder-disintegrant excipient provides the right balance between tablet robustness and disintegration.

"Ashland is a company composed of 6,500 global solvers who are passionate about providing customers with creative solutions through the application of specialty ingredients and technologies," said Vito Consiglio, group vice president, Ashland. "We are poised to enhance our position in fast-growing nutraceutical end markets and strengthen our food ingredients business through customized functional solutions. We thrive on pushing the boundaries of what's possible and focus on advancing the competitiveness of our customers. These new market-changing innovations underscore our unrivaled ability to solve."

In addition to their newest introductions, Ashland will highlight several other consumer-focused initiatives during the trade show and offer prototype samples for visitors:

***Aloe vera* – Lime Mint *Aloe vera* Vitamin Water**

This aloe vitamin water showcases Ashland's capability to provide a powder pre-mix to beverage manufacturers that contains vitamins, sweeteners, and spray-dried aloe.

Aloe vera is one of the most on-trend consumer ingredients and Ashland's *Aloe vera* can meet the requirements of the most discerning customer. To ensure a quality product, Ashland owns the farms and processes the *Aloe vera* leaves in-house. Ashland practices sustainable farming methods and responsibly invests in the local communities in which it operates. Ashland's *Aloe vera* is grown organically and is available in a range of concentrations and grades for food, beverage and personal care applications.

Probiotics – Prebiotic and Probiotic sprinkle pack

This sprinkle pack contains a proprietary 5 strain blend of micro-encapsulated probiotics plus a prebiotic. This is a direct to mouth sprinkle pack application which provides the health benefits of a prebiotic and probiotic plus great taste, convenience and portability.

Research indicates gut health influences overall health. Ashland has partnered with a leading global producer of probiotics, Probiotal Healthcare Srl., to offer premium products and cutting-edge knowledge for nutraceutical applications.

Fermented vitamins and minerals – plum ginger apple cider vinegar shrub drink

This drinking vinegar provides 2 g hydrolyzed fish collagen and 630 mg Biotin GPM to address the "beauty from within" trend and consumers' desire for fermented products.

For consumers, less sugar does not have to mean less satisfaction. Ashland's Aqualon™ CMC products build back mouthfeel for sugar-reduced beverages for an experience that is closer to full sugar.

Vitamin fortified pre-mix dark chocolate cherry almond protein bar

This delicious and nutritious bar contains 3 g MCT and 10 g protein and has only 190 calories per bar. It demonstrates Ashland's drum-to-hopper capabilities. By combining the functional powder ingredients into one powder solution, bar manufacturers can streamline their manufacturing process.

"Great synergies are resulting from our acquisition of Pharmachem," said Brian McGrath, vice president Health and Wellness, Ashland. "Our technical skills, in combination with the formulation and processing expertise of Pharmachem, are delivering exceptional solutions in health and wellness, and with our global footprint, we can serve customers around the world."

More information about Ashland at SupplySide West can be found at www.ashland.com/ssw

REBRAND® 2018 Winner of Distinction

In February, Ashland was recognized as a 2018 Winner of Distinction by REBRAND®, the pioneer awards program for branding and the leading global resource for case studies on effective brand transformations, repositioning, revitalizing and redesign of existing brand assets to meet business goals. The REBRAND® 100 awards are not a "beauty pageant," but rather they are based on bona fide business challenges and the brand strategy applied to accomplish the business objectives. Ashland was recognized this year among other prestigious winners such as COTY, Cadillac, Hewlett Packard, Siemens and more. <https://rebrand.com/> and <http://www.ashland.com/pages/rebrand-100>

About Ashland

Ashland Global Holdings Inc. (NYSE: ASH) is a premier global specialty chemicals company serving customers in a wide range of consumer and industrial markets, including adhesives, architectural coatings, automotive, construction, energy, food and beverage, nutraceuticals, personal care and pharmaceutical. At Ashland, we are approximately 6,500 passionate, tenacious solvers – from renowned scientists and research chemists to talented engineers and plant operators – who thrive on developing practical, innovative and elegant solutions to complex problems for customers in more than 100 countries. Visit ashland.com to learn more.

Media Relations

Carolmarie Brown
(302) 995-3158
ccbrown@ashland.com