

What's New

MATERIALS AND CHEMICALS

Bio-Based Solvent Performs Tough Cleaning Tasks

Elevance Clean 1200 is a highperformance degreasing and volatile organic compound (VOC)-exempt solvent produced from natural oils. It is suitable for cleaning industrial-grade complex greases, paraffin waxes, automotive lubricants, metal-working fluids, and corrosion-prevention oils, as well as animal and plant lipids and cooking greases and oils. It can be used as a pure solvent, blended with other solvents, or emulsified with the addition of surfactants. It is also suited for mechanical and immersion cleaning applications. With a pH of 6–9, the need for complicated personal protective equipment (PPE) and concerns about damaging sensitive metal substrates are eliminated. **Elevance Renewable Sciences, Inc.**

www.elevance.com

Coating Solves Challenging Paper Substrate Issues



Syl-Off SL 585 is a solventless silicone release technology designed for reliable high-speed and high-volume converting of bulk roll labels in ultraflat release systems. This coating solves problems associated with the most challenging paper substrates, such as anchorage and rub-off issues. It delivers reliable anchorage across a wide range of substrates, and supports high line speeds and volumes to maintain quality, reduce system costs, and improve productivity. The amount of platinum in the formulation is optimized for ease of handling, stable release performance in ultraflat profiles, and reduced misting at line speeds between 800 and 1,000 m/min, while still keeping cost low and the supply secure. This product is suitable for labels intended for personalcare product containers, prescription bottles, food packaging, and shipping materials.

Dow Corning

www.dowcorning.com

Additive Increases the Viscosity of Personal-Care Product Surfactants

Consumers tend to equate the thickness of personal cleansing formulations, such as body washes, shampoos, cleansers, and liquid soaps, with quality, because thicker liquid cleansers feel better on the skin. TEGO Carbomer 841 SER is a rheological additive that increases the viscosity of surfactants used in such cleansers, improving foaming properties and skin feel during application. Surfactant systems that suffer from thickening challenges, such as mild formulations based on sulfate-free, polyethylene glycol (PEG)-free, or amide-free surfactants, can benefit from this product. While standard surfactant thickeners require concentrations of approximately 1.7–3.8%, this additive achieves the same results at concentrations of 0.05–1%.

Evonik Corp. <u>www.evonik.com</u>

FLUIDS AND SOLIDS HANDLING

Drop-In Bolted Pumps Can Replace Clamp-Style Pumps

These drop-in, dimensionally interchangeable, bolted pumps can be installed in place of clamp-style pumps without the need for or expense of a new foot mount or piping changes. They come in 2-in. and 3-in. alum-



inum models that offer enhanced flowrates and allow the passage of solids. The pumps are currently available with national pipe thread (NPT) and British standard pipe (BSP) connections, and will soon be available in stainless steel.

Versa-Matic www.versamatic.com

Vibratory Screener Handles High Throughput



The K100-2(IRC)-SS round vibratory screener separates oversized particles from bulk materials at rates of up to 150 tons/hr. The screener includes a large, 75-ft² screening area and is totally enclosed for dust-tight operation. Above the conventional screen is a slightly smaller, high-capacity Kascade Internal Recycle screening deck comprised of two screens of the same mesh operating in series. This

design allows for large-scale throughput without sacrificing efficiency or increasing the equipment's footprint. Additional features include the Air-Lift quick screen-change system that allows for rapid access to the interior for inspection, cleaning, or screen changes, and the Auto-Lube automatic lubricating system that supplies food-grade lubricant to the gyratory motor bearings to extend operating life. Gravity-fed and inline pneumatic models for batch or continuous operation are available.

Kason Corp. www.kason.com

OPERATIONS AND MAINTENANCE

Large, Single-Use Bioprocessing Bags Are Easy to Handle

E-Z Deploy single-use bioprocessing bags are designed to ease the process of loading large bags into tanks and other equipment. The installation of bags larger than 1,000 L typically requires hoists and multiple technicians to align the bag in the tank, and the bag must be monitored for creases or folds to ensure uniform filling. E-Z Deploy bags can be loaded and aligned by one operator. During the filling process, the bags unfold safely. Bags are available in sizes from 1,000 L to 5,000 L, and can be used in new or existing tanks. **ASI-Life Sciences**

www.asisus.com

Bulk Containers Do Not Need Pallets

The Shipshape bulk containers are designed to promote safer handling and transport of hazardous and nonhazardous materials. The containers stack, nest, and unitize loads, eliminating the need for pallets, as well as the risk of transporting invasive pests with the cargo. The reusable, rotationally molded plastic containers integrate military-grade side release buckles and durable, waterproof strapping to ensure that the cover remains attached to the container in the event of an accident. Even when the container is completely inverted, the covers remain attached, preventing leaks and spills. The United Nations (UN) and the U.S. Dept. of Transportation (DOT) have approved these bulk containers. **Meese Orbitron Dunne Co.** <u>www.shipshapecontainers.com</u>

ENVIRONMENTAL, HEALTH, AND SAFETY Remediation Fluid Reduces

Contaminant Concentrations



PlumeStop colloidal biomatrix is a remediation technology that stops migrating groundwater contaminant plumes. It rapidly reduces contaminant concentrations with a sorptive medium, while also encouraging microbial-driven biodegradation processes. The black, silky liquid can be injected into groundwater to remediate a wide range of organic contaminants, including hydrocarbons, halogenated compounds, and a variety of volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). The fluid is designed to eliminate rebound, stop matrix back-diffusion. and meet stringent groundwater standards. Once in place, it is designed to last for decades, with minimal impact on aquifer oxidation-reduction potential or geochemistry. **REGENESIS** www.regenesis.com

Roller Doors Minimize Workplace Contamination



Sprint high-speed roller doors minimize the opportunity for contaminants to get into protected areas. A permanent tension held on the door curtains creates a seal when the doors are closed. In addition, operators can program the doors to react to different types of cargo — opening only to the necessary height for a particular vehicle. The doors can achieve an opening speed of 3.2 m/s, with minimal noise or vibration, which helps to prolong the life of the doors. They can be remotely activated by a transmitter. non-touch activation pads, or radar. A non-contact safety beam can also be supplied, which scans ahead of the descending door to identify obstructions and reduce the possibility of collisions or accidents. This technology is suitable for the food processing, pharmaceutical, warehouse, distribution, and wastemanagement industries. sara LBS

www.saralbs.co.uk