

MAY 2013 MATERIALS UPDATE

Material ConneXion®

As part of our promise to provide our clients with the newest and most innovative materials sourced from around the world, we are pleased to present our monthly Materials Update. Here you will find the latest materials to have been added to the database, upon their acceptance by our regular jury process.

These materials can be seen online and on-site at our New York location. Selected materials are also available at our Cologne, Daegu, Milan, and Bangkok locations; please call or email us at any of the addresses listed for more information.

Interested in these materials but not a client? Our subscription-based Materials Library is the world's largest library of advanced, innovative and sustainable materials and processes. With 45-60 new materials added every month, our libraries around the world give you immediate access to 7,000+ materials onsite and online, Material Specialists and Monthly Updates on what's new.

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CATEGORY INDEX

Carbon

Cement

Metal

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Natural

Process

MC#: 1930-08

Decorative non-woven textile which is lighter and stronger than paper and more versatile than fabric. Composed of high density polyethylene (HDPE), this material is durable, dimensionally stable, tear resistant, and can withstand repeated folding and flexing.



MC#: 2166-03

Light-weight foamed polyethylene (PE) film which is designed as a lighter weight alternative to other packaging films. The optical opacity of the film leads to better UV resistance, thermal insulation and durability.



MC#: 2687-27

A decorative tile comprised of mother of pearl inlaid into designs. The Capiz shells are farm raised and backed with a nonwoven textile for support and stability. Applications include wall coverings, decorative displays, furniture and indoor decorative items.



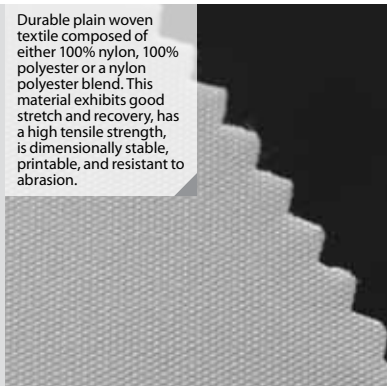
MC#: 3495-27

Transparent leno textile composed of 60% acetate, 10% polyamide and 30% PES-metal blend. The metallic thread is inserted into the weave at the same time as the weft yarns, creating a varied metallic sheen to the fabric.



MC#: 2567-14

Durable plain woven textile composed of either 100% nylon, 100% polyester or a nylon polyester blend. This material exhibits good stretch and recovery, has a high tensile strength, is dimensionally stable, printable, and resistant to abrasion.



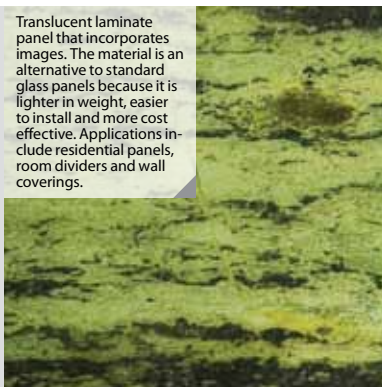
MC#: 4828-06

Polyester fabric wall-covering that has the appearance of wood. This wallcovering is fire retardant, chemical and stain resistant, sound absorbent and is made from recycled content and may contribute to LEED credits. headboards.



MC#: 4828-07

Translucent laminate panel that incorporates images. The material is an alternative to standard glass panels because it is lighter in weight, easier to install and more cost effective. Applications include residential panels, room dividers and wall coverings.



MC#: 4879-04

Dyeing technology for denim that eliminates multiple steps in the process resulting in significant reductions in water use (92%), power consumption (30%) and cotton waste (87%).



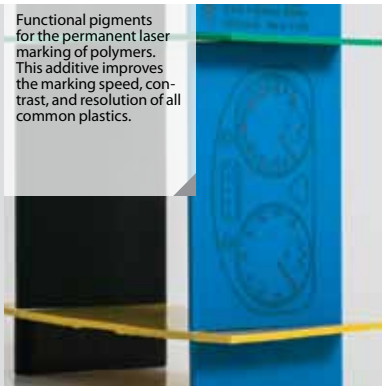
MC#: 5086-17

An optically transparent, soft silicone gel sheet, with one adhesive face. This gel offers a 99% light transmittance, making it exceptionally clear, comparable to glass.



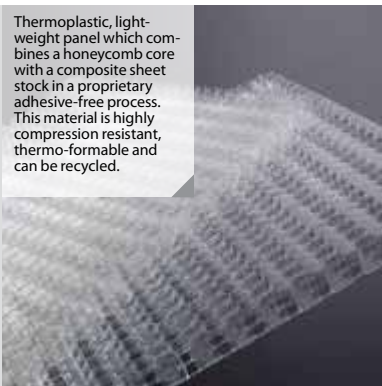
MC#: 5243-03

Functional pigments for the permanent laser marking of polymers. This additive improves the marking speed, contrast, and resolution of all common plastics.



MC#: 5287-04

Thermoplastic, light-weight panel which combines a honeycomb core with a composite sheet stock in a proprietary adhesive-free process. This material is highly compression resistant, thermo-formable and can be recycled.



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MC#: 5654-02

Combination quick dry and soil release finish (QSR) which is applied to a variety of woven textiles. This finish does not alter the hand or breathability of the textile, and the soil release works on the principle of diffusion, where soil can be easily released by washing.



MC#: 5654-03

Durable membrane with a colored metallic appearance, unique for a functional membrane. Composed of polyurethane (PU), this membrane is laminated to fabric to create composite textiles which are light, soft, water repellent, breathable and elastic.



MC#: 5965-02

Wood veneer laminated between two glass panels which becomes translucent when backlit. A specialty process eliminates seams and stitching of the wood veneer to create continuous panels with minimal thickness.



MC#: 6023-02

Waterproof multi-layer textiles which contain micro-porous 'active carbon' particles that accelerate breathability, and provide odor resistance and UV protection to the textile.



MC#: 6251-05

Decorative metal sheets of recycled aluminum, stainless steel or galvanized steel that give the appearance of aged and higher cost metals. The sheets are VOC free and recyclable as aluminum.



MC#: 6394-03

Glass mosaic tiles made from float glass and recycled powder glass. A proprietary process is used to combine the float glass and recycled powder glass. Applications include indoor and outdoor interior walls and swimming pools.



MC#: 6435-02

High performance triacetate bi-component fiber which allows for the breathability of fabrics to change in reaction to humidity caused by perspiration.



MC#: 6580-02

Soft, closed-cell, rubber foam which exhibits low compression, excellent recovery capability after compression, cushioning properties and is shock absorbent. The closed cell structure protects against fluids, germs, bacteria and fungi, from penetrating the material.



MC#: 6580-03

Extremely soft, lightweight cellular rubber foam with shock absorbing properties, and delayed recovery capability (shape memory). The closed cell structure protects against fluids, sweat, germs, bacteria and fungi, from penetrating the material.



MC#: 6727-02

A light source that uses OLED (Organic Light Emitting Diode) technology to produce even and disperse light. Unlike most lighting systems this material emanates light from a continuous surface, not generating visible source points, like a filament does in a bulb.



MC#: 6727-03

An OLED (organic light emitting diode) panel that produces uniform light across its entire surface. The lack of light 'points' or hot spots is unique to OLED panels; the lighting across the surface is consistent and diffuse.



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MC#: 6967-02

A process to enhance the surface of carbon fiber parts by applying a tinted, transparent glossy or matte lacquer to the surface. The tinted carbon process is a spray method using a special-sized coating.



MC#: 6967-03

Coating for the creation of metal surfaces on any paintable substrate (organic, plastics, construction materials). After the application process, the surfaces show similar properties to cast metal including durability, strength, and resistance to strain.



MC#: 7000-03

A blend of wheat starch and polypropylene (PP), this resin minimizes polymer usage by loading the resin with starch. Biobased content offers the benefit of decreasing the amount of non-renewable resources used.



MC#: 7000-04

A polymer composite that blends recycled polypropylene and fine pine wood particles (wood flour) from lumber manufacturing waste. The combination of the two materials creates a material process-able with standard plastic manufacturing.



MC#: 7000-02

A compostable bioplastic comprised of natural and synthetic polymers, the base of which is starch from grain sources. This biopolymer exhibits improved heat tolerances over that of most bio-based plastics with a heat deflection temperature (HDT) of 199°F (92.8°C).



MC#: 7049-01

A series of hyper-durable flouropolymer powder coatings for exterior architectural applications. This material requires only one coat, so uses less product and energy compared with products and is designed to meet the requirements of AAMA2605-05.



MC#: 7050-01

A wood plastic composite (WPC) which is comprised of PVC (polyvinyl chloride) and rice husks. The combination of PVC and natural fibers provides added benefits to the material's physical properties over those of natural wood materials.



MC#: 7051-01

Synthetic suede textile which is soft to the touch, breathable, absorbent and exhibits high abrasion resistance.



MC#: 7051-02

Synthetic suede textiles, primarily composed of polyester (PET), which exhibit high taber abrasion resistance in relation to their thickness. This material has a low water intake and outperforms other synthetic suede fabrics.



MC#: 7051-03

Synthetic textiles, primarily composed of polyester, which exhibit high abrasion resistance as well as additional functional properties such as wet grip, high dexterity or high visibility.



MC#: 7052-01

A printing technique that adds textural designs to fabrics using raised TPU (thermoplastic polyurethane) ink. Complex patterning is possible with this technique, with individual dots and line thickness at a minimum of 5µm (0.19 mil).



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MC#: 7053-01

Recycled polyester fiber that uses post-consumer PET (polyester) from drink bottles. The filaments produced are comparable in every way to virgin polyester; including physical strength, processing techniques and visual quality.



MC#: 7053-02

A polyester fiber that provides protection against UVA and UVB rays, a UPF rating of 50+ is achieved through the inclusion of titanium dioxide (TiO2) in the fiber.



MC#: 7053-03

A polyester fiber that promotes evaporation and dryness through moisture wicking and transport. Soil release properties are also expressed, improving stain resistance of sweat, grass, red wine, mustard, etc.



MC#: 7053-04

A polyester fiber with anti-bacterial properties and inhibiting the growth of mold, mildew and algae. Fabrics made with 100% of this fiber show a 4+ log reduction in odor causing bacteria growth.



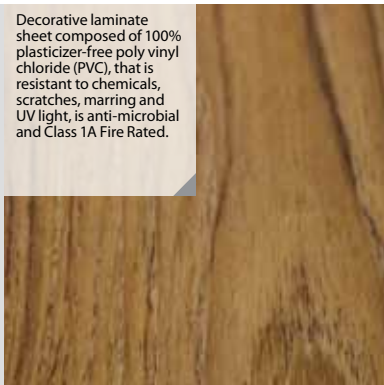
MC#: 7054-01

Labeling material composed of natural, Fair Trade paper pulp made from sustainably harvested hemp (40%) and wildgrass (60%) and adhesive.



MC#: 7055-01

Decorative laminate sheet composed of 100% plasticizer-free poly vinyl chloride (PVC), that is resistant to chemicals, scratches, marring and UV light, is anti-microbial and Class 1A Fire Rated.



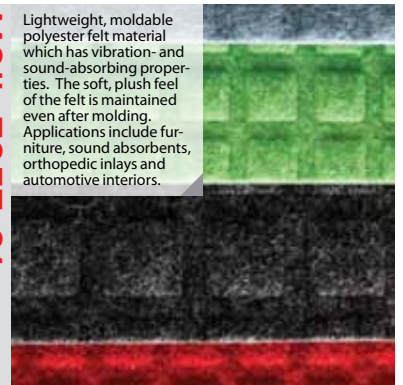
MC#: 7056-01

Lightweight warp knitted fabric composed of 39% cotton, 39% ramie and 22% polyester. This fabric has the appearance of a pin-striped woven fabric and due to its unique construction the fabric will not fray or unravel when cut or torn.



MC#: 7057-01

Lightweight, moldable polyester felt material which has vibration- and sound-absorbing properties. The soft, plush feel of the felt is maintained even after molding. Applications include furniture, sound absorbers, orthopedic inlays and automotive interiors.



MC#: 7058-01

High performance warp knit textile with a distinctive grid pattern on the face of the fabric. Composed of 80% polyamide and 20% elastane, this material is elastic, will not snag or run easily, has a high resistance to piling, and is bluesign® certified.

