

JUNE 2011 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 over 4,500 materials onsite and online, Material Specialists and Monthly Updates on what's new.

Become a member of Material ConneXion® today!

Contact us at 212 842 2050 or access@materialconnexion.com to find out about more about membership levels and benefits.

Need hands-on expertise?

Our Advanced Material Solutions Team™ provides a wide array of consulting services. Contact us at consulting@materialconnexion.com or call today.

Andrew H. Dent, PhD

Vice President, Library & Material Research

Material ConneXion®

P +1 212 842 2050

E adent@materialconnexion.com

W www.materialconnexion.com

Chompoonuj Weerakitti

Director, Library & Materials Research

Material ConneXion® Bangkok

P +66 (0) 2 664 8448

E cweerakitti@materialconnexion.com

W www.materialconnexion.com/th

Karsten Bleyemehl

Director, Library & Materials Research

Material ConneXion® Cologne

P +49 (0) 221 99 22 28 - 22

E kbleyemehl@materialconnexion.com

W www.materialconnexion.com/de

Sun Ah Kim

Director of Library & Consulting

Material ConneXion® Daegu

P +82 53 740 0033

E sakim@materialconnexion.com

W www.materialconnexion.com/kr

Micol Costi

Director, Library & Materials Research

Material ConneXion® Milano

P +39 02 39 32 55 85

E mcosti@materialconnexion.com

W www.materialconnexion.com/it

JUNE 2011 MATERIALS UPDATE

Material ConneXion®

CATEGORY INDEX

Carbon

Cement

Metal

Glass

Polymer

Ceramic

Natural

Process

MC#: 2239-07

Dimensional surface panel created with a proprietary process to mold a melamine surface onto a particleboard or plywood backing. The core is sandwiched and molded with a melamine sheet to produce a dimpled surface. Applications include doors and door inserts, and furniture.



MC#: 5190-02

Coated upholstery fabric that is ink- and stain-resistant. It is available in polyurethane (PU) and vinyl (PVC) coated versions and resists ball point pen ink and other stains when a damp cloth and alcohol is utilized for stain removal. Applications are for upholstery.



MC#: 5190-03

Acrylic (PMMA) backed, outdoor upholstery fabric composed of Zeftron® nylon, a high-performance yarn engineered for intensive use environments and retain its appearance in high-traffic areas. Applications are for outdoor upholstery.



MC#: 5190-04

100% solution-dyed nylon woven upholstery fabric coated with a Nano-Tex® finish and backed with DuraBlock™. Nano-tex® protects from spills and stains, the DuraBlock backing is a breathable, liquid-proof film. Applications are for outdoor upholstery.



MC#: 5533-04

Embossed aluminum with a 'stucco-look' surface. It is available in coils, strips, or sheets and has a hard, textured surface that is UV-, weather-, and corrosion-resistant. Applications are for exteriors (facades and roofs) or interiors (interior design and furniture design).



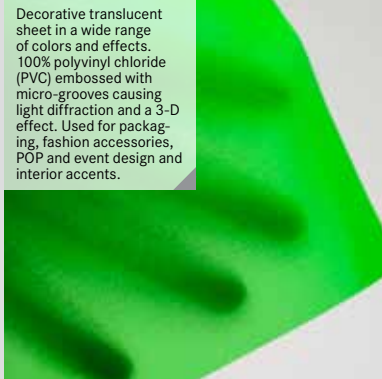
MC#: 5670-05

Decorative flexible sheet in a wide range of colors and effects. They are 100% polyvinyl chloride (PVC) that has been embossed with micro-grooves causing light diffraction and a 3-D effect. Used for packaging, fashion accessories, POP and event design.



MC#: 5670-06

Decorative translucent sheet in a wide range of colors and effects. 100% polyvinyl chloride (PVC) embossed with micro-grooves causing light diffraction and a 3-D effect. Used for packaging, fashion accessories, POP and event design and interior accents.



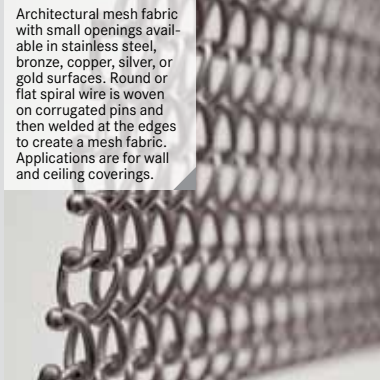
MC#: 5912-03

High performance 'glow-in-the-dark' elastomer (TPE) ribbon. The ribbons are pigmented with a light responsive additive and become fully charged with 5-30 minutes exposure to light and glow for up to 12 hours. Used in product design, apparel, footwear, and outdoor way finding.



MC#: 5946-06

Architectural mesh fabric with small openings available in stainless steel, bronze, copper, silver, or gold surfaces. Round or flat spiral wire is woven on corrugated pins and then welded at the edges to create a mesh fabric. Applications are for wall and ceiling coverings.



MC#: 6603-02

Photochromatic multilayer polymer made of 80% HDPE and 18% TPE. The TPE is the outer layer of the sheet, containing the photochromatic pigment that enables the bottle to blush (in this case, turn red) when exposed to sunlight. Applications are packaging.



MC#: 6659-03

Custom handmade wallpapers that use shards of glass for decorative and textural effect. Backed with a non-woven fabric for strength, they are covered with small pieces of glass. Applications are for interior design, commercial fittings and merchandising.



JUNE 2011 MATERIALS UPDATE

Material ConneXion®

CATEGORY INDEX

Carbon

Cement

Metal

Glass

Polymer

Ceramic

Natural

Process

MC#: 6659-04

Custom handmade metal leaf wallpapers. These wallpapers are backed with a non-woven for strength, and covered with a real metal leaf. Applications are for interior design, commercial fittings and merchandising.



MC#: 6659-05

Custom handmade textured metal leaf wallpapers. These wallpapers are backed with a non-woven and covered with a real metal leaf. Applications are for interior design, commercial fittings and merchandising.



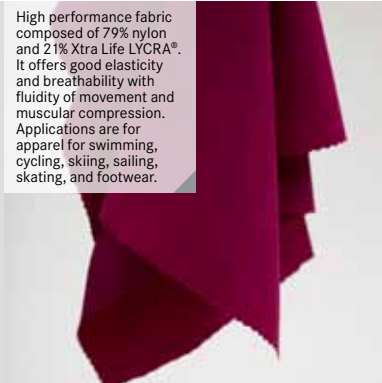
MC#: 6765-03

High performance fabric that incorporates micro-encapsulated caffeine, retinol, fatty acids, aloe and vitamin E. Extremely lightweight, ultra thin, and breathable, it has excellent non-curling and shape retention properties, while being opaque. Applications are for undergarments.



MC#: 6765-04

High performance fabric composed of 79% nylon and 21% Xtra Life LYCRA®. It offers good elasticity and breathability with fluidity of movement and muscular compression. Applications are for apparel for swimming, cycling, skiing, sailing, skating, and footwear.



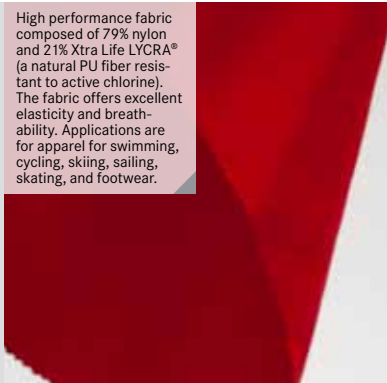
MC#: 6765-05

High performance fabric composed of 84% nylon and 16% LYCRA®. It has a two way stretch offering excellent elasticity and able to maintain its shape even after several uses. Applications are for apparel for swimming, cycling, skiing, sailing, skating, and footwear.



MC#: 6765-07

High performance fabric composed of 79% nylon and 21% Xtra Life LYCRA® (a natural PU fiber resistant to active chlorine). The fabric offers excellent elasticity and breathability. Applications are for apparel for swimming, cycling, skiing, sailing, skating, and footwear.



MC#: 6773-15

Chemical and corrosion-resistant HDPE sheets that are food prep safe. They have excellent impact strength and no moisture absorption, chemical and corrosion resistant and are easy to weld, machine or thermoform. Applications are for food processing.



MC # 6774-09

Polyolefin based open micro-cellular foam from an "ultra-clean" foaming process that is free of chemical foaming and cross-linking agents producing very low out-gassing and residual contaminant. Used for cushioning, healthcare, and industrial foams.



MC#: 6796-01

FDA approved antimicrobial additive for fibers that protect against bacteria. This technology uses silver and copper ion-elements bonded to a ceramic zeolite built into the fiber giving permanent antimicrobial protection. Applications are clothing, blankets.



MC#: 6796-02

Polyester staple fiber made from 100% post-consumer recycled PET bottles. This fiber is produced by melting plastic bottles and extruding them into fibers. Applications are clothing, blankets, carpets, wall coverings, auto interiors and home furnishings.



MC#: 6796-03

FDA approved antimicrobial additive for ABS, TPU, silicone, and most other plastics that is approved to protect against 99.99% of bacteria. Weight, color, and texture vary depending on the clients specifications. Applications are cell phone covers, toys, and interior surfaces.



JUNE 2011 MATERIALS UPDATE

Material ConneXion®

CATEGORY INDEX

Carbon

Cement

Metal

Glass

Polymer

Ceramic

Natural

Process

MC#: 6798-01

Thermo regulating fibers made of hollow polyamide (PA) that produce lighter fabrics (25 - 30% lighter than standard PA) while keeping the same thickness or the same weight in terms of insulation and protection. Applications are for protective winter garments and thermal underwear.



MC#: 6799-02

Papers made from algae waste and FSC certified fibers that are ISO 14001 compliant. Algae that would otherwise clog up the Venice lagoon is harvested annually and combined with FSC fibers in order to produce this low-environmental impact paper.



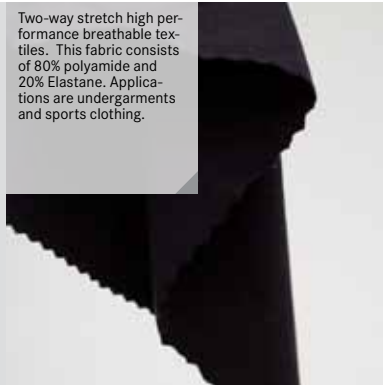
MC#: 6801-02

Decorative glass mosaic tiles from different diameter circles plus random chips. Back painted different colors and backed with glass fiber mesh to ensure good spacing between the mosaic pieces, applications are for walls and backsplashes & vertical surfaces.



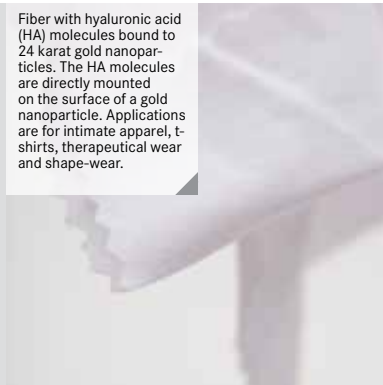
MC#: 6797-01

Two-way stretch high performance breathable textiles. This fabric consists of 80% polyamide and 20% Elastane. Applications are undergarments and sports clothing.



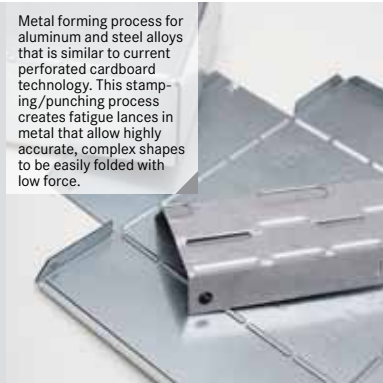
MC#: 6798-02

Fiber with hyaluronic acid (HA) molecules bound to 24 karat gold nanoparticles. The HA molecules are directly mounted on the surface of a gold nanoparticle. Applications are for intimate apparel, t-shirts, therapeutic wear and shape-wear.



MC#: 6800-01

Metal forming process for aluminum and steel alloys that is similar to current perforated cardboard technology. This stamping/punching process creates fatigue lances in metal that allow highly accurate, complex shapes to be easily folded with low force.



MC#: 6804-01

Vinyl tiles composed of 95% PVC that mimic wood flooring. These tiles are a durable, realistic wood-look surface that is constructed with a 4 layer structure. Applications are for flooring.



MC#: 6797-02

Circular knitting fabric composed of 86% nylon and 14% LYCRA® Xtra Fine. This fabric is very light (50% thinner compared to a classic chameuse.) Applications are for intimate clothing.



MC#: 6799-01

FSC certified papers generated from renewable resources that are ISO 14001 compliant. They enable high definition printing similar to matte coated paper while maintaining the tactile characteristics of a natural paper. Applications are for packaging.



MC#: 6801-01

Large format back painted mosaic 100% recycled glass tiles. They come in sheet sizes of 300 x 295 mm (12 x 12 in) and 300 x 98 mm (12 x 4 in) backed with a glass fiber mesh to ensure exact spacing between tiles. Used for walls and backsplashes & vertical surfaces.



MC#: 6805-01

Kapok fiber that consists of 64% cellulose, 13% lignin, and 23% pentosan. Kapok is harvested from the fluffy fiber surrounding the seeds of the tropical kapok tree. Applications include stuffing for pillows, mattresses, upholstery, sleeping bags, and jackets.



JUNE 2011 MATERIALS UPDATE

Material ConneXion®

CATEGORY INDEX

Carbon

Cement

Metal

Glass

Polymer

Ceramic

Natural

Process

MC#: 6806-01

Glass tiles that have been hand back painted with decorative effects in metallic shades. The paint is a two component polyurethane (PU) that offers UV- and fade-resistance and is available in 41 colors. Applications are for bathrooms and kitchens.

