

MARCH 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.

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Material ConneXion®

CATEGORY INDEX

Carbon

Cement

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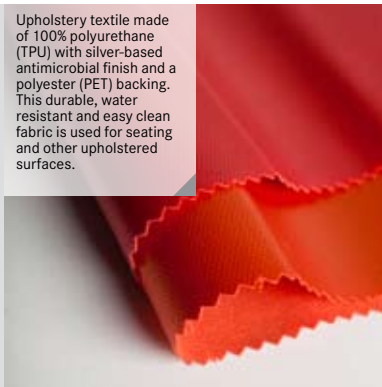
Ceramic

Natural

Process

MC#: 0314-21

Upholstery textile made of 100% polyurethane (TPU) with silver-based antimicrobial finish and a polyester (PET) backing. This durable, water resistant and easy clean fabric is used for seating and other upholstered surfaces.



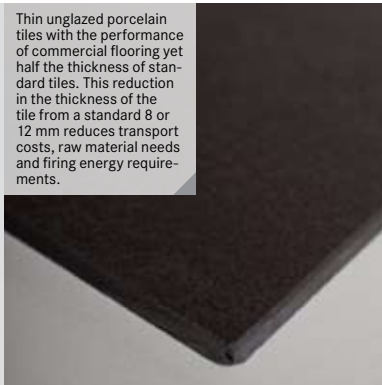
MC#: 2002-10

Full-body, unglazed porcelain tiles manufactured using 10% post-industrial recycled materials salvaged from prior manufacturing processes or finishing processes (this is an Italian Government regulation minimum). Applications are for flooring.



MC#: 2002-12

Thin unglazed porcelain tiles with the performance of commercial flooring yet half the thickness of standard tiles. This reduction in the thickness of the tile from a standard 8 or 12 mm reduces transport costs, raw material needs and firing energy requirements.



MC#: 2277-06

High performance multifilament yarn that combines seven high strength polyethylene (UHMWPE) fibers and one expanded poly tetrafluoroethylene (ePTFE) fiber, creating a strong fray- and abrasion-resistant fiber with low vibration and noise. Used for fishing line.



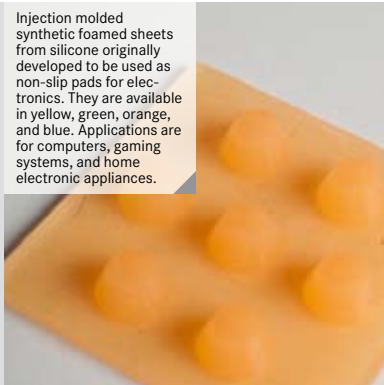
MC#: 2002-11

Full-body, unglazed porcelain tiles manufactured using 10% post-industrial recycled materials salvaged from prior manufacturing processes. They have good abrasion, thermal shock, frost-, chemical-, stain-, UV-, and skid-resistance.



MC#: 5086-09

Injection molded synthetic foamed sheets from silicone originally developed to be used as non-slip pads for electronics. They are available in yellow, green, orange, and blue. Applications are for computers, gaming systems, and home electronic appliances.



MC#: 5086-10

Synthetic tapes made from silicone developed for shock absorption and vibration damping applications. The silicone tapes have very low water absorption, high compressibility and low compression set over a wide temperature range.



MC#: 5086-11

Small injection-molded silicone parts that have very low water absorption, high compressibility and low compression set over a wide temperature range. Current applications are for cell phones, computers, gaming systems, and home electronics.



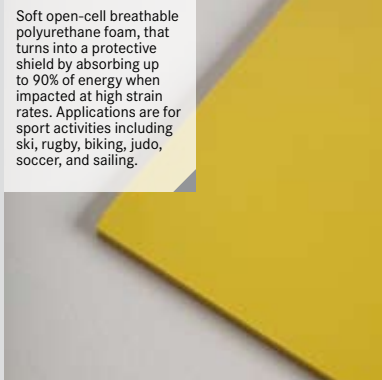
MC#: 5241-01

Recyclable engineered packaging solutions with shock-absorbing, highly transparent film. Utilizing less storage space and fewer materials, this packaging system reduces the volume of traditional packaging materials used by 78%. Used for the packaging.



MC#: 5343-33

Soft open-cell breathable polyurethane foam, that turns into a protective shield by absorbing up to 90% of energy when impacted at high strain rates. Applications are for sport activities including ski, rugby, biking, judo, soccer, and sailing.



MC#: 5831-03

Sound insulating panels made of particles of elastic agglomerated eco-rubber (90% post consumer waste from recycled tires) bonded into sheets with a polyurethane (PU) binder and adhered to gypsum board (drywall). Applications are for sound insulation.



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MC#: 5831-04

Anti-shock flooring made of expanded post industrial rubber scraps with a PVC coated surface. The rubber scraps are bonded together to create a resilient cushioning layer that the impact and cut-resistant PVC fabric is applied to. Used for flooring in playgrounds.



MC#: 5831-05

Impact protection flooring made of expanded rubber available in three versions that are differentiated by their color. The flooring is durable, easy to clean, and has good compression set. Applications are for edge protection in sport facilities and schools.



MC #6142-06

Continuous filament cellulosic nonwovens. Most nonwovens are composed of either natural staple fibers, which can lint or catch on objects, or synthetic fibers, which faller in liquid absorption, retention, heat resistance, and biodegradability.



MC#: 6751-02

100% polyester (40% post consumer recycled) carpet tile backing that increases sound absorption by 60 % over standard leading carpet tiles. Applications are for commercial & residential flooring.



MC#: 5908-02

Particleboard with formaldehyde emissions comparable to that of natural wood. This high-density panel uses melamine-urea-formaldehyde (MUF) glue and has a fine, sanded surface along with a screwable core. It is suitable for structural walls.



MC#: 6751-03

Cradle to Cradle® Silver Certified carpet tile backing that enables complete upcycling of carpet tiles. This backing consists of a pre-coat and stabilizer, heavy coating and stabilizer, glass scrim, and a secondary backing. Applications are for flooring.



MC#: 6751-04

Carpet tiles that capture and retain hazardous dust particles and are classified for heavy contract use. This carpeting is certified with GUI Gold logo for being four times more effective than standard carpet solutions for retaining fine dust. Used for commercial flooring.



MC # 6772-02

Unlike traditional acoustic tile, which is difficult to scrub and wash, these panels are formed and finished for germ resistance and easy washing and handling while still maintaining a high sound absorption coefficient. They are suitable for healthcare environments.



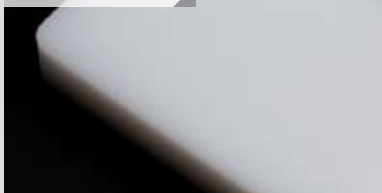
MC#: 6773-01

Non-porous rigid polymer sheet made from 100% high density polyethylene (HDPE) Resin. The sheet has a high density with very low porosity making it easy to clean, preventing moisture absorbency, bacteria or odors, peeling, cracking or chipping and is dishwasher safe.



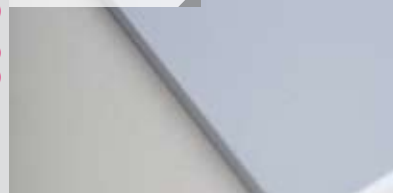
MC#: 6773-02

Non-porous rigid polymer sheet made from 98% high density polyethylene (HDPE) resin and 2% foaming agent, produced utilizing co-extrusion technology that allows for solid outer surfaces with a foamed core. Applications are for food preparation cutting boards.



MC#: 6773-03

Lightweight, flame-retardant polypropylene (PP) sheets specially formulated to exceed the fire rating for polymers in semiconductor and clean room applications. Used for laminar air flow stations, cleanroom accessories, and fume hoods.



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MC#: 6773-04

Cost-competitive, flame-retardant polyvinyl chloride (PVC) sheets specially formulated to exceed the fire rating for polymers in semiconductor and clean room applications. The sheets are lightweight and available as bright white with a smooth finish.



MC#: 6773-05

Lightweight, flame-retardant polypropylene (PP) sheets specially formulated to exceed the fire rating for polymers in semiconductor and clean room applications. They also offer good chemical resistance and are easy to fabricate.



MC#: 6774-01

Negative pressure wound therapy (NPWT), silver-treated foam. This open-celled, reticulated polyurethane foam accelerates wound healing with its pore size, contractility, and non-absorbency. Currently used in wound dressings and cushioning applications.



MC#: 6774-02

Biocompatible, hydrophilic, silver-treated foam. This open-celled polyurethane foam can absorb eight times its weight in water, but will not swell when it has been saturated. The foam passes ISO 10933 standards for biocompatibility for medical use.



MC#: 6773-06

Durable, flame-retardant polymer sheets developed to withstand harsh chemical, thermal and ultraviolet environments. These PVDF (polyvinylidene fluoride) sheets are resistant to most acids, bases, and organic solvents. Used in the pulp and paper industries.



MC#: 6774-03

Open celled foam with exceptional absorbency, hand, and durability. Composed of polyethylene (PE), this foam has better liquid absorbance than leading hydrophilic polyurethane foams. Current applications including absorbent pads, medical dressings, and wipes.



MC#: 6774-04

Microcellular, low out-gassing foam. This strong and rigid, closed-cell microcellular foam is polyolefin based and manufactured through a proprietary ultra-clean foaming process. Uses include building applications and vapor control.



MC#: 6774-05

Low impact customizable microcell foams. These open-celled foams may be formed from any thermoplastic polymer and resin, including PE, PP, nylon, PLA, and PTFE. Uses include industrial filters, ink stamps, and cosmetic applicators.



MC#: 6775-01

Landfill-bound waste flooring made from cabinet and furniture companies in and around Texas in the US. The top coat of the veneer is made with water based stains and an aluminum oxide compound, which protects the floor from scratches.



MC#: 6776-01

Plum seed charcoal paper. This paper, made from recycled pulp and umeboshi plum seed charcoal, has natural deodorizing and moisture absorbing properties. Applications range from shoe inserts to refrigerator shelf liners.



MC#: 6777-01

Polymer based blend of ABS and polyamide. This moldable resin compound is suitable for injection molding, extrusion and rotomolding. When molded, the resin has a tensile strength of 45 psi when dry and 35 psi when moist. Used in appliances and automobiles.



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MC#: 6778-01

Particleboard made with 100% post-consumer wood using a low-impact manufacturing process (ISO 14001). This particle board is made using recycled wood from pallets, furniture, chippings, pruning of trees, wood packaging and boxes, and processing residues.

