LAMINATES INCLUDING TWO OR MORE LAYERS OF ORGANIC SYNTHETIC FILAMENT NON-WOVENS AND GLASS FIBER WEBS AND SCRIMS

In accordance with the invention, a laminate of two or more layers and the method of making it is provided. The laminate includes at least one organic synthetic filament non-woven layer, and at least one woven web or scrim of glass fibers pre-consolidated by a binding agent. The polyester non-wovens and the woven webs or scrims are bound by needling such that a part of the (e.g., polyester) filaments penetrate through the laminate and emerge at the lower surface of the laminate and lie adjacent thereto The formed laminate is subjected to a final consolidation by an acrylate or a styrene binder.

SILICONE BASED FLAME RETARDANT SYSTEMS FOR TEXTILES

A silicone composition is provided which comprises at least one polysiloxane or siloxane oligomer functionalized with at least one amino group and at least three functional groups capable of cross-linking wherein the polysiloxane or siloxane oligomer imparts flame retardancy on a cellulose-containing substrate. Further embodiments of the present invention include a method for making and a cellulose-substrate comprising the aforementioned silicone composition.

SILICONE COATED FABRIC AND AIR BAGS

The present invention provides a silicone coated fabric comprising a base woven fabric that is formed from a synthetic fiber weaving yarn that has a yarn size of from 100 to 270 dtex, and a weaving size expressed by a product calculated by multiplying the yarn size of a weaving yarn and a weave density (ends or picks/2.54 cm) of from 10,000 to 25,000 (dtex.ends (or picks)/2.54 cm) in both the warp direction and the weft direction, a silicone being applied to the woven fabric in an amount of from 5 to 25 g/m<2>, and having on one side a uniform silicone coating layer formeding part of the silicone mentioned above. The silicone coated fabric of the present invention is a lightweight coated fabric that shows improved heat resistance, improved flexibility and an improved low coefficient of friction as well as particularly improved burning resistance. The fabric can therefore be used for producing lightweight and compactly storable airbags that suppress bursting starting from a burnt-through-hole, and that shorten a deployment time.

FLAME RETARDANT PLASTIC COMPOSITION, YARN AND TEXTILE STRUCTURE COATED THEREWITH

The invention concerns a halogen-free flame retardant plastic composition, for coating a substrate, comprising an acrylic resin and an intumescent agent. It is in the form of plastisol, and comprises therefor a plasticizing medium wherein the acrylic resin and the intumescent agent are dispersed, said plastisol being formulated such that, in

combination: the viscosity remains not more than 6000 mPa's, measured with a Brookfield RTV viscometer at 20 revolutions per minute, its rheological behaviour is pseudo-plastic and Newtonian.

MATERIAL COMPRISING OR CONSISTING OF FIBRES AND NANOCLAY

The invention relates to a material, preferably a nonwoven, comprising or consisting of one or more fibres, preferably polymer fibres. In addition, the material contains nanoclay for improving the flame-retardant action of the fibres

CERAMIC COATING FOR FABRICS

Ceramic compositions for rendering fabrics resistant to molten metal are provided

FLAME-RETARDANT LEATHER-LIKE SHEET BASE AND PROCESS FOR PRODUCING THE SAME

The leather-like sheet substrate of the invention comprises a nonwoven fabric of three-dimensionally entangled superfine fibers (A) of at most 0.5 dtex in fineness and a polymer elastomer (B) filled in the entangled interspaces of the nonwoven fabric, in which the superfine fibers (A) comprise an organophosphorus component-copolymerized polyester and the polymer elastomer (B) contains a metal hydroxide or is copolymerized with an organophosphorus component. The leather-like sheet substrate of the invention and artificial leather obtained from it contain no halogen and are resistant to flames. These have a soft feel and are suitable to applications in the interior field that requires flame retardancy, especially to seats for vehicles, etc

3-DIMENSION CRIMP POLYETHYLENETEREPHTHALATE MULTIFILAMENT FOR CARPET

Disclosed is a 3-D crimp polyethylene terephthalate multifilament (BCF) having a stress-strain curve that (a) it elongates less than 5.0% when subjected to an initial stress of 1.0 g/d, (b) it has an initial modulus of 20 to 60 g/d, (c) it elongates at least 20% when subjected to a stress region of 1.0 to 2.5 g/d and (d) it elongates from a tensile strength of at least 3.0 g/d to the tensile strength at break. The BCF has improved physical properties such as excellent flame retardancy, high toughness, improved crimp uniformity and improved compressive elasticity modulus.

HIGHLY FLAME-RETARDANT AND HYGROSCOPIC FIBER AND FIBER STRUCTURE

The present invention provides fiber and a fiber structure having a high flame-retarding property and high moisture-absorptive property which do not generate noxious gases such as hydrogen halide gas upon burning, do not elute heavy metal compounds and phosphorus compounds therefrom even when reclaimed upon discarding including a

burning treatment and have an excellent processing property. The present invention discloses a highly flame-retarding and moisture-absorptive fiber, characterized in that , it comprises an organic polymer having a cross-linking structure and a salt-type carboxyl group in which at least a part of such a salt-type carboxyl group is a magnesium salt type and a saturated moisture absorption rate at 20 C and 65% relative humidity and a limiting oxygen index are not less than 35% by weight and not less than 35, respectively, and a flame-retarding fiber structure wherein the highly flame-retarding and moisture-absorptive fiber is used in at least a part of the structure

AQUEOUS FLAME RETARDANT RESIN COMPOSITION

The aqueous resin composition comprises components (A) and (B), wherein (A) is a synthetic resin emulsion prepared by emulsion-polymerizing a radical-polymerizable unsaturated monomer using a surfactant having at least one polymerizable unsaturated bond, and (B) is a polyphosphate salt. To provide an aqueous flame retardant resin composition which is excellent in flame retardancy and storage stability, and is less likely to produce a fogging phenomenon

FLAME RETARDANT FOR POLYMERIC MATERIALS

flame retardant predominantly of polymeric materials, appearing as a novel chemical compound, viz, ammonium salt of nitrolotris(methylene)phosphonic acid amide