

ABS Color-Full Filament

FILABOT

Filabot has created a 3D printing filament made of recycled materials and a mix of leftover colorants. The Filament is 1.75mm or 3mm in diameter and the diameter tolerance is +/-0.05mm, compatible with most 3D printers.



The color filament is made from a virgin base resin (ABS) and is mixed with random colorants to produce this color. Once a user prints with the material they can recycle it in Filabot systems.



Filabot uses the highest quality recycled plastic, colorants and base ABS, from suppliers in the US. Filabot's manufacturing practices are very conservative. They do not like to waste and look at many options for the best possible solution when they are produce filament for their machines.



A MSDS is not available for this product yet. There are no known carcinogens for the filament.



Filabot has a upcycling system in which they collect plastic utensils from their partner's, Ben and Jerry's and Citi Market (a co-op foodstore), and turn them into materials. Filabot produces all ABS Filaments in house, in the United States.

Tyvek

DUPONT

Tyvek is made from 100% high-density polyethylene fibers. It is lightweight, flexible, smooth, particulate-free, opaque and resistant to water, rot, chemicals, abrasion and aging. Tyvek is equally strong in wet or dry conditions. It has a high strength-to-weight ratio and neutral pH.



Tyvek is made from petroleum-based high density polyethylene (HDPE) strands formed into a sheet, and Titanium Dioxide. A unique flash-spinning process eliminates the use of binders. Local polyethylene recyclers (#2) accept Tyvek, and DuPont provides a system for reclaiming and downcycling used non-hazmat Tyvek.



DuPont does not provide details regarding any byproducts of Tyvek's manufacturing process. However, the company has been involved in a number of lawsuits regarding drinking water and air contamination, and the production of virgin HDPE is known to produce air and water pollution.



Tyvek contains no harmful binders and is chemically inert. It is not known to be dangerous to human health or the environment with normal use. However, if burned, it will release carbon monoxide and carbon dioxide.



DuPont offers STEM-based education programs for students, and provides research grants to untenured faculty around the world.

Ocean Plastics

METHOD

Method has teamed up with Sustainable Coastlines in order to harvest discarded plastic from the oceans to use for their packaging.



Method is the first company to use plastic waste from our oceans as packaging for products. They reduce material by eliminating the need for colorants and the result is a grey bottle made from combination ocean plastic and PCR plastic.



Method partnered with Envision Plastics in order to combine and process a minimum of 10% ocean plastic with local 100% PCR plastics. Method designs their bottles in a closed-loop system for maximum recycling possibility. The manufacturing process of recycled plastic emits 78% less GHG emissions than virgin resins.



The bottle does not contain BPA, phthalates, heavy metals or allergens.



Method created a new supply chain for their ocean plastics forming partnerships with organizations with shared environmental values and goals. Method's design innovation brings awareness to a problem and inspires behavioral change.

Polygal Standard

POLYGAL INC.

Polygal Standard is a multi-walled polycarbonate plastic sheeting that is available in various colors and degrees of transparency. It is manufactured with coatings to add durability and to prevent UV yellowing. It can be used for most conventional roofing and glazing applications.



Polygal sheets are made of extruded translucent polycarbonate.



Polycarbonate can be recycled into granulate for use in new products. Plazit-Polygal has locations around the world in order to provide different regions with local sources of Polygal. Its light weight reduces GHG emissions in transport. Its layered structure provides excellent thermal insulation.



Polygal Standard can produce toxic smoke if burned and may leach Bisphenol A when in contact with water. Otherwise, polycarbonate is nontoxic during structural use.



Polygal has been expanding their domestic (North American) manufacturing facilities. Polygal manufactures in North and South America, Israel, and Russia.

Origins Polyethylene Panels

YEMM & HART

Origins is a high-density polyethylene sheeting made from 100% post-consumer plastic. It's ideal for restroom and shower partitions, vanities, tabletops, and countertops. It can be used as a laminate or a solid surfacing material.



Origins is made from 100% post-consumer milk jugs and detergent bottles acquired in North Carolina and manufactured in Pennsylvania. All materials used are reclaimed from the United States.



All waste from the manufacturing process is recycled, including wastewater which is reused in Origins' facilities. Air pollutants meet legal emission standards. Yemm & Hart offer a takeback program for reclaiming end of life Origin sheets. This material is packaged and shipped in wooden pallets with chipboard interleave.



Origins creates no VOCs, air pollutants, carcinogens, or known toxic substances during production, installation or intended use. If burned it will release CO2 and carbon monoxide.



Yemm & Hart offer benefit programs for all of their employees. This company employs local members of the community at all manufacturing and corporate locations.

Eastman Tritan

EASTMAN PLASTICS

Eastman Tritan is a BPA-free copolyester with heat-resistant qualities. Eastman plastic is mainly used for housewares and is dishwasher safe but is also suitable for water bottles, hand tools, jewelry, medical tools, musical instruments and other objects.



Eastman plastics enable bottle converters to reduce scrap rates and lower energy usage. Eastman Aspira™ One polymer has been tailored specifically for extrusion blow molding (EBM) processes and packaging applications.



Eastman is compatible in the PET recycle stream (#1) and has lower processing and drying temperatures because pellets are not crystalline or solid-stated.



Eastman Tritan is free of BPA, halogens, and antimony.



Eastman supports a number of social charities and has worked on creative solutions to major issues like poverty and drought worldwide. Eastman maintains an admirable level of transparency regarding their environmental impact, giving access to all output information.

Print-Superfici Plastic Laminate

ABET LAMINATI

Print-Superfici is plastic laminate with backing which can be used on vertical and light-duty horizontal surfaces. Abet Laminati's LCA indicates that their wallcovering is an environmentally friendly alternative to metal decorative surfaces.



Abet Laminati's material is a high pressure laminate (HPL) composed of a decor surface with layers of kraft paper, backing paper, chipboard and glue. The adhesives used are phenolic and melamine resin. Upon request, Abet Laminati will use FSC certified material. Products are shipped on wooden palettes.



Abet Laminati's LCA indicates 95% of energy can be recovered through thermal recycling. Abet Laminati reclaims HPL dust to create Tefor, a food-safe, light-duty surfacing material also containing polypropylene. Abet Laminati distributes chip samples in reusable binders so individual pages can be swapped out and updated.



Print-Superfici Plastic Laminate meets the GREENGUARD Certification Program's standards for indoor air quality. Abet Laminati's HPL, when adhered to particleboard, lowers VOC (formaldehyde) emissions between 80% -95% of the industry average of 0.18 PPM for unfinished particleboard.



Abet Laminati's company vehicles are hybrids. They also donate laminate sample sets to schools and artists.



Weep Vents and Masonry Mat

CAVCLEAR

CavClear Masonry Mat and Weep Vents are composed of post-consumer recycled plastic drainage materials made from recycled polyester fiber. They are used together to provide continuous drainage behind masonry, and to prevent mortar “bridges”.



Both materials are composed of PCR plastic from soda bottles. Masonry Mat is heat-bonded while Weep Vents are bonded with liquid vinyl chloride. Weep Vents are shipped in cardboard with LTL carriers, which is efficient for relatively small shipments. Masonry Mat is packaged in LDPE bags (#4) which can be difficult to recycle.



These products prevent thermal and moisture transfer and provide ventilation which reduces energy cost and increases a building's lifespan. Scrap fiber is reused in manufacturing. Masonry Mat can be reclaimed and reused during building demolition. Weep Vents are not recyclable due to a liquid binder used in manufacturing.



Like many materials, when burned Weep Vents and Masonry Mats release hazardous gas compounds. With normal use, Masonry Mats and Weep Vents are stable and do not pose a hazard to human health.



CavClear is an active member of US Green Buildings Council, and strives to develop and apply sustainable design features in new constructions. CavClear donates product to local gardeners and fundraisers, construction products, and a local technical college. CavClear currently (2015) donates space and equipment to a developing food co-op.

Varia Ecoresin

3FORM

Varia Ecoresin is a line of resin panels containing post-consumer recycled content. Varia Ecoresin Full Circle products are made in collaboration with artisans around the world. 3Form offers a variety of panel choices including different colors, patterns, and textures for greater customization of individual spaces and products.



40% of the material is PCR high-density polyethylene and the other 60% is virgin HDPE. 3Form recycles its waste in-house for reuse in other products. 3form limits packaging to solely what is needed to protect goods, select easily recyclable shipping material, and install a custom crate assembly area to properly size outbound crates.



3Form's reclaim program reuses and recycles materials removed from installations and full-sized panels damaged during production. Reclaimed material is then sold on their website at a lower price.



In manufacturing, polyethylene emits fewer toxins than other plastics. There are no VOCs or carcinogens emitted during normal use.



3Form collaborates with remote communities to source handcrafted artisan materials to add to their resin panels. Their Full Circle program benefits communities and villages by helping their economies grow, their culture flourish, and providing them with health and education opportunities.



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LonEco Topseal

LONSEAL INC.

LonEco Topseal is a factory-applied urethane finish that protects the floor, reduces scuffing and simplifies routine maintenance. It's suitable for corporate, sport, healthcare, school and non-residential flooring. Lonseal offers both interior and exterior solutions.



Topseal contains 50% PIR content. Lonseal has a manufacturing-waste vinyl recycling facility, but does not have a take-back program. Products are shipped in rolls on reusable palettes with recyclable packaging.



Topseal is UV coated, reducing wastewater, and production recycles to nearly 1 million gallons of water each day. The flooring is very durable with a long useful life and are specially designed to be low VOC-emitting. Research by U.S. NIST and BEES indicates vinyl is environmentally superior to recycled-ceramic tile or linoleum.



Lonseal's production process ensures that workers are not exposed to carcinogenic vinyl chloride monomer (VCM). Lonseal complies with indoor air quality emission requirements, certified by the Resilient Floor Covering Institute and Scientific Certification Systems.



Lonseal is a member of the Collaborative for High Performance Schools (CHPS).



EcoForms Saucer

ECOFORMS

EcoForm saucers are made from rice hulls and are available in a variety of sizes and colors. They will last at least five years outdoors and can be biodegraded in municipal compost or landfill facilities.



EcoForms are made of rice hulls, a renewable agricultural byproduct. EcoForms also contain nontoxic organic pigments and a biodegradable starch adhesive. Scraps are reclaimed and incorporated in the product.



EcoForm's facility is solar-powered and its local delivery trucks are run on biodiesel. Production uses little water and produces no waste.



EcoForms are made of bio-based and organic materials and are nontoxic.



EcoForms manufacturer is a family-owned business.

100 Percent

3FORM

100 Percent is an opaque polymer sheet made entirely of post-consumer HDPE. It can be customized by size, color, and pattern for each space or product. It's ideal for workspaces, including counters and tabletops.



100 Percent is composed of 100% fused post-consumer HDPE bottles and containers. 3Form ships on pallets or in protective crates. The company uses minimal packaging, selects easily recyclable shipping materials, and installs a custom crate assembly area to properly size outbound crates.



During the manufacturing process there is almost no waste because each order can be custom made. Any waste produced is recycled in-house to make more products. 100 Percent does not decompose naturally. It can be recycled through a chemical process of melting the plastic down. In 2011 3Form won Utah Recycler of the Year.



In manufacturing, polyethylene emits fewer toxins than other plastics, and because 3Form uses no virgin materials, the manufacturing process is even safer. No VOCs or carcinogens are emitted during normal use.



3Form's reclaim program donates any sheets that cannot be used for installation to community projects. 3Form continually trains its employees to assist them in lowering their personal carbon footprints.



I'm Green Polyethylene

BRASKEM

I'm Green Polyethylene is an innovative plastic that uses ethanol sugarcane rather than fossil-sourced raw materials such as oil or natural gas. It can be used in many applications including packaging, films, caps and closures, bags, and more.



I'm Green Polyethylene is made from sugarcane-ethanol, a renewable raw material. Production captures and fixes CO₂ from the atmosphere, which helps to reduce greenhouse gases emission.



Cane-ethanol and its products are manufactured in southern Brazil, where 90% of sugarcane is grown. The sugarcane is not grown using a long-term sustainable irrigation system, however, Braskem recognizes that changes to their system are necessary.



There are no carcinogens released during normal use, however, if heated, the plastic emits carbon monoxide.



Braskem has no known socially-conscious initiatives or policies.

Green Dot

GREEN DOT

Green Dot produces a line of bioplastics and biocomposites; some are biobased, some biodegradable. Green Dot develops customized formulations made from renewable, reclaimed, recycled or virgin materials to meet the physical specifications required by their customers.



Terratek products use renewable pine wood fiber, wheat starch, and polypropylene. In Terratek WC, the polypropylene has been reclaimed, and the wood fiber is waste from the lumber industry. Terratek WC and SC contain up to 60-65% renewable material.



Terratek reduces waste by using reclaimed material and offering compostable plastics. Terratek Flex has been designed to compost in both industrial and backyard settings. Green Dot's manufacturing facility is in a small town in north-central Kansas.



Terratek Flex is BPA, phthalate and heavy-metal safe. Terratek Leather is manufactured without dangerous solvents, adhesives or emissions. An MSDS is available.



Green Dot works locally and regionally to teach students about environmental issues and promote educational opportunities in science. Green Dot is a small company, located in Kansas, with less than 10 full time employees. Green Dot is an equal opportunity employer. All full time employees receive company health benefits.