



ECOLOGY CENTER FARMERS' MARKETS

Environmental Guide for Crafts

At the Ecology Center, we have a commitment that only sustainably produced items are sold at the Berkeley Farmers' Markets. The same commitment applies for the annual Crafts Fair. This guide is a resource to help consider craft products, and find alternatives to replace harmful materials. Topics covered are Jewelry, Textiles, Paper Crafts, Paint, Ceramics, Body Products, Wood, Candles, and Leather. Many shoppers are willing to pay more for locally produced crafts that are made with care, and demand for these products is high. We thank you for helping us create a crafts marketplace that demonstrates and inspires care for the health of people and our planet.

JEWELRY - METAL AND GEMS

Best Practices: Comply with California's [Metal-Containing Jewelry Law](#). Test jewelry materials for lead, including pre-soldered chains, clasps, etc. To test for lead: pour boiling water over the pieces to clean them and then let them soak (unless made from wood) for a few hours. If there are stones that have been dyed, the water washes away excess dye, and helps clean off anything that the stones or pearls may have been exposed to in processing. When dry, test using a lead-test swab. Vintage gems and recycled metals are preferred whenever possible, to reduce harmful impacts of mining extraction for new materials.

Sourcing: As stones and pearls come from all over the world, it is very difficult to create criteria for these materials based on source, since they usually travel without a manifest showing their origin. There are a few certifications that can guide on sourcing issues - see links below. Vintage gems and recycled metals are preferred.

Avoid: The biggest problem with jewelry is sourcing from mines that pollute, are destructive of habitat, and have unethical labor practices. The presence of toxic materials in the jewelry itself is of concern for the health of jewelers and customers — primarily lead and other heavy metals.

Certifications: [Ethical Metalsmiths](#); [Green America's Green Business Certification](#); [SCS Global Services](#).

TEXTILES

Best Practices: Natural animal (wool, leather, suede, sustainably raised for pelts), plant, or fungi-based fibers. Linen, wool, and hemp are best fibers to use in the U.S. Organically grown cotton is next best. Sourcing textiles from reclaimed sources (e.g. vintage fabric, etc) to repurpose is also better than buying virgin fabric. The following fabric types are not ideal, but are preferred to synthetic, petroleum-based fabrics: viscose rayon, bamboo/soy, and Tencel Lyocell™. These fabrics are based in natural cells like cellulose, lignin, and other plant fiber; however, their manufacturing process requires great input of petroleum-based chemicals and often output pollutants.

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Sourcing: Second hand shops (brick and mortar or online shops) for vintage/reclaimed fabric to repurpose. Manufacturing seconds (leftover textiles from warehouses, etc).

Dyes: Avoid synthetic, petroleum-based dyes. Acid, water-based, plant, fungi, and insect-based dyes are best. Local sources of natural dye supplies include: [Dharma Trading Company](#), [A Verb for Keeping Warm](#).

Avoid: With exception of vintage fabrics, avoid non-organically grown cotton. Conventionally grown cotton is the world's most sprayed crop and accounts for about 25% of worldwide pesticide use. Avoid polyester/nylon and other petroleum-based textiles (polyester fleece, etc). Most synthetic cloth is linked to the petroleum industry and its many negative impacts. Various polyester fibers and synthetic fleeces are shown to break down over time into tiny plastic microfibers that are polluting the oceans.

Certifications: [GOTS](#) (organic certification), [International Association of Natural Textile Industry](#).

PAPER CRAFTS

Best Practices: Use 100% post-consumer recycled paper (PCW) or [tree-free](#) paper such as hemp, flax, kenaf, bagasse, cotton, or banana. Look for Processed Chlorine-Free (PCF). Vegetable-based inks are considered safer than petroleum-based inks. If you use non-recycled paper, look for [Forest Stewardship Council \(FSC\)](#) certification, which comes from sustainably-managed forests.

Sourcing: Salvaged paper products are available at some second-hand stores, such as [The East Bay Depot for Creative Reuse](#), [Urban Ore](#), and [SCRAP](#). Check out Canopy's [Ecopaper Database](#). Some brands to consider: [New Leaf Paper](#), [Mohawk](#), [Ecosource Paper](#). Environmentally-conscious print shops, such as [Greenerprinter](#), [Autumn Express](#).

Reduce Waste: Buy paper products from second-hand stores. Use the blank side of once-used paper. Explore making your own hand-made paper from discarded materials.

Avoid: Non-FSC paper made from virgin forest products; paper bleached with chlorine.

Certifications: [FSC Certified](#); [Green-e Certified](#); [Ancient Forest Friendly](#), [Green America's Better Paper Project](#).

PAINT

Best Practices: Least toxic paints are water colors and other naturally based paints (including milk paint). Use naturally derived or plant-based pigments. Comply with ASTM D 4236, chronic hazard labeling standard. Finishes impact [Indoor Air Quality \(IAQ\)](#) and should be selected to be non-hazardous when the craft item is used as intended. Properly dispose of hazardous paint materials, recycle unused paint, or donate so that it may be reused. Visit [StopWaste.org](#) for Alameda County resources on safely disposing of hazardous waste (most paint), or call 800-606-6606.

Sourcing: Artist supply stores; [EcoHome Improvement](#), a local business offering zero VOC paints, and stains & sealers. Info: [The Upstyle Wood Guide](#) offers information on finishes, stains, and sealers for wood.

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Reduce Waste: [The East Bay Depot for Creative Reuse](#) accepts donations and resells artist paints (no house paint). [PaintCare Program](#) lists locations around the Bay Area, where you can drop-off your partially-used paint materials to recycle, OR find a location for recycling your empty paint cans. PaintCare sites accept house paint and primers, stains, sealers, and clear coatings (e.g., shellac and varnish) but they do not accept aerosols (spray cans), solvents, and products intended for industrial or non-architectural use.

Avoid: Oil paint is generally the most toxic, and next acrylic paints. Oil paints use solvents (usually turpentine/mineral spirits) to thin them and clean up after their use. Though acrylic paints can be thinned with water, they are plastic products and not environmentally benign. With all paints, the pigments that give them color are responsible for the most toxic ingredients. These ingredients include mercury, cadmium, lead, chromates, arsenic, barium, etc. Labels can also inform about VOCs (volatile organic compounds). Select low or no-VOC products for paints, adhesives, and sealants. Avoid materials listed in California's Prop 65. Hazardous ingredients can include acetone, methyl ethyl acetone, xylene, and toluene.

Certifications: Art and Creative Materials Institute (ACMI) certifies paint with two levels -

1. AP Approved Product Seal certified to contain no materials in sufficient quantities to be toxic or injurious to humans, including children, or to cause acute or chronic health problems.
2. CL Cautionary Label for paint that contains any material in sufficient quantities that it has the potential to be an acute or chronic health hazard.

Other certifications: [UL \(Underwriters Laboratories\) Sustainable Products Guide](#); [Greenguard Certification](#).

CERAMICS

Best Practices: Commercial glaze manufacturers label their glazes using ASTM D-4236. Use only glazes that are AP Non-toxic. (By this standard, non-toxic only refers to lead and cadmium). Because it takes a lot of electricity or gas to fire a kiln, it is best to fire pieces as little as possible. One simple way to conserve energy is to dry work thoroughly with an electric fan rather than through energy intensive kiln preheats. Instead of firing sub-par work, reuse the clay in a more satisfactory piece. One of our vendors had the best solution - using a kiln powered by solar panels. For the health and safety of potters and their employees, [Ceramic Arts Daily](#) has a guide for reducing hazards in the studio.

Sourcing: Local clay may be available by developing relationships with local construction businesses to mine clay from their excavation refuse.

Reduce Waste: Ceramic artists can reclaim all clay scraps and reprocess them into new clay. Offer packaging materials that are recycled or reused, like recycled newspaper, boxes, or reused packing peanuts.

Avoid: Toxic substances used in ceramics are often found in the glazes. Some of the worst are: barium carbonate (not safe for foodware), cadmium, chromates & chromic acid, cobalt oxide & carbonate, copper, iron chromate, lead (not safe for foodware), potassium dichromate/bichromate (not safe for foodware), and uranium compounds.

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BODY PRODUCTS

Best Practices: Work towards “Keep it Simple,” and eliminate any unnecessary ingredients in your body product crafts. Naturally-derived aromatics (plant or animal fragrances) are the preferred alternative to synthetics. Natural aromatics such as essential oils (steam- and hydro-distilled from leaves, woods, flowers and seeds), floral absolutes such as rose and jasmine (solvent-extracted), and carbon dioxide extractions (of leaves, woods, flowers and seeds) are alternatives to synthetic fragrance. There are also hydrocarbon extractions such as phytols, solvent-extracted concretes full of plant waxes, and simple maceration/infusion of plant material in stable oils. Plant-based ingredients should be organically grown or sustainably wildcrafted, fair trade certified if imported, and not genetically modified. For bases, choose natural ingredients, like beeswax, essential oils, nut oils, vegetable oils, cocoa butter, etc. We recommend that you label your body care products with a list of the ingredients.

Sourcing: Look for products that are organically grown, locally produced, fair trade, from worker collectives or cooperatives/co-ops, and/or sustainably wildcrafted.

Reduce Waste: Containers or packaging of body products should be as reusable or recyclable as possible. Glass jars and bottles are both reusable and recyclable, as are metal containers. Paper and cardboard can be recycled or composted.

Avoid: “Fragrance” on an ingredient list usually means that it contains phthalates. Phthalates are endocrine disrupters, as are parabens, which are used as preservatives in cosmetics. Avoid synthetic ingredients, petroleum-based waxes and oils, if possible. The ‘[Dirty Dozen](#)’ cosmetic chemicals to avoid: BHA and BHT, Coal tar dyes: p-phenylenediamine and colours listed as “CI” followed by a five digit number, DEA-related ingredients, Dibutyl phthalate, Formaldehyde-releasing preservatives, Parabens, Parfum (a.k.a. fragrance), PEG compounds, Petrolatum, Siloxanes, Sodium laureth sulfate, Triclosan. Some harmful ingredients can persist in the environment. For example, nitro musks and musk ketones have been found in soil, water, and fish, and do not easily degrade. For packaging, avoid plastics #3 and #7. If you elect to use plastic, #2 and #5 are better choices.

Some natural plants used in body care products can also raise concerns: sandalwood is extinct or on the verge of extinction in many countries, conflict palm oil is connected to rainforest destruction, and rosewood essential oil from Brazil is a product of deforestation.

Certifications: [Skin Deep Database](#); [Natural Products Association](#); [Fair Trade Certified](#); [Non-GMO Project Verified](#); [USDA Organic](#); [Certified CCOF](#); [Oregon Tilth](#).

WOOD

Best Practices: Under best practices, wood is a biodegradable, durable, and renewable resource. Contribute your craft to these practices by selecting wood that is salvaged, FSC-certified, or sourced locally from alternative sources like arborists. For sheet plywood, choose formaldehyde-free and low-VOC options. For

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wood that needs a finish or seal, use nontoxic oil and wax coatings, like linseed oil, tung oil, or beeswax. Consider using rapidly renewable bamboo.

Sourcing: Search EcoDirectory: wood -- sustainable/reused; Local arborists may have unmilled logs or branches suitable for crafts.

Reduce Waste: There are dealers specializing in old growth woods that have been salvaged from a number of different sources. If you want to reuse pallet wood, look for their stamp: heat treated (HT) pallets are safe to reuse; methyl bromide (MB) pallets - do not reuse. If using salvaged wood that has been previously painted, it may contain lead. There are home lead test kits which can be helpful, but are only able to test the paint on the surface of the item. Do not sand paint that may contain lead. As you work, find ways to reuse scraps, and collect clean sawdust (from unpainted, untreated wood) to use for compost, animal bedding, etc.

Avoid: Don't buy material sourced from old growth forests unless it is a salvaged product. Most imported tropical hardwoods (mahogany, teak, ebony, etc.) are also very bad environmental choices. For seals or finishes, avoid oil-based polyurethane and varnishes made from solvents and synthesized chemicals.

Certifications: Forest Stewardship Council (FSC) certifies wood that has been sustainably harvested. SCS Global Services CalCOMPLiant (CARB) Certified for composite wood products in California.

CANDLES

Farmers' Market Note: *We have beeswax candles available year-round from our honey vendors, so we will not accept Craft Fair vendors whose primary product is beeswax candles.*

Best Practices: While all candles release soot, some waxes burn cleaner than others. For healthier candles, use local beeswax, vegetable wax from organic soy or sustainably-produced palm wax. Used cooking oil can also be made into candles.

Sourcing: Local beekeepers, farmers' markets, candle/herb/natural food stores, online dealers.

Reduce Waste: Choose repurposed and upcycled glass or metal vessels for container candles.

Avoid: Most candles are made with paraffin, a petroleum product. When burned, paraffin candles release known carcinogens (cancer causing substances) such as benzene, toluene, formaldehyde, acetaldehyde, and acrolein. Most soy waxes (such as EcoSoya) are derived from GMO soybeans. To avoid GMO's with certainty, soy wax should be derived from certified organic soy oil. Wax from palm oil can be linked to the destruction of tropical rainforests and endangered species. The increasing use of palm oil, even if it responsibly sourced, drives up the demand for new palm oil plantations worldwide.

Certifications: Roundtable on Sustainable Palm Oil (RSPO) certifies sustainably produced palm oil derivatives.

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LEATHER

Best Practices: Vegetable tanned leathers (uses natural, organic-based materials in processing) that are processed domestically in North America. The leather is ideally sourced from pasture-raised animals.

Dyes: Best practices include using water-based, low to no-VOC dyes or natural plant dyes.

Sourcing: Domestic North American tanneries, local leather/hide companies.

Avoid: Avoid synthetic leathers (majority are petroleum-based), as they are highly processed with synthetic chemicals and are not biodegradable. Avoid chrome-tanned/synthetically-tanned leathers, as they create leathers that also do not biodegrade.

Certifications: Pure Natural Leather Certification International Association of Natural Textile Industry.

HELP

If you would like assistance with any of the issues raised in this document, the Ecology Center's Education & Engagement Program and the our Farmers' Market staff are available to help. Also, suggestions or tips on topics covered here are appreciated.

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