



Top Reasons to Go PVC-Free

Polyvinyl chloride (PVC or vinyl) plastic poses serious environmental and health threats at all stages of its lifecycle: from manufacturing to use to disposal. Here are the top reasons you should choose to use PVC-free outdoor advertising materials.

Hazardous Production

PVC products are made from toxic, cancer-causing chemicals, and the use of raw materials such as ethylene dichloride (EDC) and vinyl chloride monomer (VCM, a known human carcinogen) produces high volumes of hazardous waste that contaminate the air, land and water surrounding the factories where PVC is produced. PVC production also creates extremely toxic byproducts such as dioxin, PCBs and hexachlorobenzene (HCB).

Toxic Additives

PVC requires more toxic additives than any other plastic. These include heavy metals such as lead and organotins to stabilize PVC; chromium and cadmium to color it; and plasticizers such as phthalates to make it flexible. Many of these additives are not chemically bound to the plastic and can migrate out of products posing potential hazards to consumers. In addition, thousands of PVC products ranging from carpeting and wall covering to toys and medical products are produced at facilities throughout the world, exposing both workers and nearby residents to these harmful additives and byproducts.

No Harmless, Non-toxic Use

In addition to the migration of the PVC's toxic additives to consumers and end users, accidental structural fires involving PVC products (such as siding, flooring, roofing, and even shower curtains) release deadly hydrogen chloride gas. Also, in recent years, numerous studies have found a correlation between phthalates emitted from PVC building products and asthma (and other respiratory ailments).

Unsafe Disposal

According to the EPA, PVC waste in municipal and medical waste incinerators is one of the largest sources of dioxins (which were also, for historical reference, the main contaminants in Agent Orange). In addition, there are over 8,400 landfill fires reported every year in the U.S. These fires burn PVC waste, with PVC being identified by the EPA as the largest single source of dioxin in this waste. Toxic PVC additives also leach out of the waste and contaminate groundwater below landfills.

Problematic Recycling

PVC has a national recycling rate far lower than other plastics. Less than one percent of PVC plastic is recycled, making it the least recycled of all plastics. PVC is also a major contaminant to the recycling stream of other plastics such as PET, and one PVC bottle can contaminate and ruin a recycling load of 100,000 recyclable PET bottles if not properly separated.

Safer Cost-Effective Alternatives Are Widely Available

In almost all areas where PVC is used, especially in construction (siding, piping, flooring and wall coverings) and printing there are safer and competitively priced alternatives ranging from sustainably harvested wood to cement, metal and modern plastics that are made without chlorine or other toxic chemicals.