

Vinyl and the planet of the APES by David A. Chasis

There is a conspiracy afoot on this planet initiated and maintained by what I call the Anti-Progressive Extremists Society (APES). This pessimist group deals in fear and propaganda as tools to attack a chosen subject. They would be a laughable lot if their attack campaigns were ignored. But alas, many of their unproven, unscientific and unscrupulous accusations are peddled by the Western media who, looking for sensationalism at the expense of facts, give them a bully pulpit. One of the smear campaigns APES members have undertaken in recent years is to attack plastics in general and vinyl (PVC and CPVC) in particular.

Vinyl is one of the most ubiquitous materials in use today. It is used in packaging, clothing, furniture, medical supplies, automobiles and many other industries, but its major use (65 percent of total PVC poundage) is in the construction industry for products that include pipe, siding, fencing, decking, wire-insulation, conduit and valves. This market has embraced vinyl and made it, in many cases, its preferred material because of its proven benefits of durability, being easy and safe to use, environmental friendliness and cost-effectiveness. Now, you would think that a material that uses less energy to produce, has less emissions of CO₂ in its manufacturing process, doesn't have to be replaced for centuries, and has one of the lowest installed cost of any building material would be lauded by APES members. Instead, they seem to have an unbridled desire to see vinyl banned from use everywhere. Let me share with you their attack issues and the facts.

Chlorine is bad. Of course this statement ignores that chlorine is one of the most numerous elements in the world, a major ingredient in salt, bleach and most pharmaceuticals and, arguably, has saved more lives in its use of disinfecting water for drinking purposes than any other world health initiative ... ever.

Vinyl creates dioxins. Dioxins are compounds which are suspected of being human carcinogens. APES members claim that vinyls pollute the environment with dioxins. In reality, the largest contributors of dioxins (USA-EPA findings) are forest fires, wood burning fireplaces, coal-fired utilities, metal smelting, diesel trucks, sewage sludge landfills and burning of trash. One study showed vinyls produce 13 grams of dioxin a year (that's less than a half ounce). Another irrefutable fact is that dioxin levels in the USA have decreased 90 percent in the past 30 years while vinyl production has increased 300 percent during that same time period.

When vinyl burns, hydrogen chloride gas is emitted. This is true. And, when wood burns carbon monoxide is emitted. Are the APES members saying that one toxic gas is better than the other? Let's get real. With any residential or commercial structure you name, there are much more harmful fumes given off by other construction materials than by vinyls. Why? Because vinyl construction materials account for less than 5 percent by weight of most buildings.

Vinyl chloride monomer (VCM) could be harmful to humans and vinyl manufacturers are the prime source of emitting this gas. Thirty-five years ago there were reported incidents that excessive VCM, an intermediate material in the vinyl production chain, was excessively present in a few manufacturing facilities. The vinyl industry in cooperation with OSHA and the EPA completely re-engineered vinyl production facilities which have resulted in reducing VCM emissions by 99 percent.

Phthalates pose a threat to human health. Phthalate is a resin additive called a "plasticizer" which causes PVC material to be soft and flexible for such products as shower curtains and flexible tubing. There are no plasticizers in rigid PVC piping so phthalates are not an issue but these public undocumented assertions harm all PVC products. There have been years of scientific studies in the USA and Europe concerning phthalates with no meaningful data whatsoever showing they are a danger to human well-being.

Unfortunately science and facts don't seem to sell in our skewed media culture. But in spite of these factors, the vinyl industry is pursuing something called Life Cycle Assessment (LCA). LCA is a process which analyzes a product from birth to death. This process results in determining the energy, economic and environmental impact of the entire product cycle in a quantitative manner. Preliminary results of these studies show vinyl building products are more favorable than other comparable materials.

Vinyls by any objective measurement have been a phenomenal boon to our world. Let us all be aware of the lies, guile and dogma of a cadre of well-funded and misguided activists so they don't create for us a planet of APES. ■

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