

Message in a Bottle: The Myth of PVC Recycling

PVC is Hazardous from Production to Disposal

Production

The production of polyvinyl chloride, commonly known as "PVC" or "vinyl," involves fusing vinyl chloride molecules with plasticizers, stabilizers, and fillers to create the final product. PVC production has been found to expose workers and surrounding communities to high levels of vinyl chloride and other known carcinogens. Studies have shown a link between working in PVC plants and the development of rare liver cancer, angiosarcoma of the liver, and other non-cancer diseases.

Useful Life

Many products are made from PVC plastics. These products include beverage containers, vinyl siding, medical equipment, and children's toys. These products have been found to leach toxic additives during their lives. Toxins from PVC bottles leach into the contents inside the bottle, and eventually into the user. Lotions, soaps, bug repellants, shampoos, and maple syrups are some common products found in PVC containers.

Disposal

Despite PVC industry claims, less than 1% of PVC bottles are recycled every year. The other 99% end up in incinerators or landfills. When burned, PVC releases dioxin, a potent human carcinogen that threatens human and environmental health even at very low concentrations. Burning PVC also releases acutely toxic acid gases into the environment. When buried in landfills, PVC releases toxicants into the earth, and eventually into groundwater.

For more information, please visit www.gtm.org/pvc

PVC Recycling is Not a Solution

PVC Recycling Does Not Exist

PVC recycling began in the 1990s as a vinyl industry attempt to put a pro-environment spin on their product. However, after ten years, the rate of PVC recycling has averaged less than 1% per year and has fallen to barely trace levels. The only time PVC recycling went as high as 2% was during the heavily subsidized Vinyl Institute attempt to jump-start PVC recycling.

PVC Recycling Cannot Exist

PVC's share of the bottle market is simply too small to sustain any economically viable recycling programs. PVC's already small market share decreased by 50% over the last ten years. Due to the small number of PVC bottles in circulation, it is uneconomical to develop extensive and costly infrastructure for collecting and recycling PVC.

PVC Recycling is Not Wanted

PVC complicates the recycling process to the point where its minor presence significantly undermines PET (#1 plastics, i.e. soda bottles) recycling. Due to the close resemblance of PVC and PET bottles and the small amount of PVC bottles in the recycling stream contamination readily occurs. Furthermore, at the temperature that PET melts, PVC burns. This ruins the batch of PET and the processing equipment, and undermines the successfully established PET recycling industry.

Government: Take Action!
Learn how on Page 2



Protect Your Community



GrassRoots Recycling Network urges you to protect your community's health, environment, and recycling programs by discouraging the sale, manufacture, and purchase of PVC bottles. Join other communities standing against PVC by adopting the following resolution.

Model PVC Resolution

Whereas PVC bottles in the recycling stream create significant contamination problems for PET bottle recycling, and

Whereas the PET recycling infrastructure is well developed, and

Whereas PVC bottle recycling infrastructure cannot be developed economically, and

Whereas PVC has a much lower melt temperature than PET, meaning it burns before PET begins to melt destroying surrounding PET and harming processing equipment, and

Whereas even very small amounts (100 parts per million) of PVC in loads of PET will reduce the value or make the PET unusable, and

Whereas PVC cannot be separated in traditional plastic recycling wash systems without expensive detection equipment, and

Whereas, PVC bottles can easily be mistaken for PET during manual sorting, as both plastics are used for clear bottles, and

Whereas there is no technical need to package products in PVC bottles, and

Whereas even when PVC bottles are separated from the post-consumer bottle stream, recycling is a serious challenge due to low value, small volume, and scarce markets.

Therefore, we, the _____ do hereby resolve as follows:

1. To discourage the manufacture, sale, and purchase of PVC bottles in our community.
2. To encourage product manufacturers to bottle in material that is more readily recycled and does not threaten existing plastics recycling programs.



210 N. Bassett Street, Suite 200
Madison, WI 53703
Telephone: 608-255-4800
www.grn.org