

HomeFree

Understanding Product Literature: Vinyl

Healthy Building Network does not view vinyl as a healthy material. Its production always releases highly toxic vinyl chloride and dioxins, and usually releases, depending upon the technology, asbestos or mercury pollution. When burned upon disposal or in a building fire it generates dioxins, which are among the world's most toxic substances. However, if vinyl must be used in building interiors, a close read of product literature can help affordable housing practitioners avoid some of the hazards common in vinyl products.

While completely disclosed ingredients are rare, product literature for vinyl products (Technical Data Sheets, Environmental Product Declarations, etc.) may state which additives are used in compounding. The tables below aim to indicate which of these additives are to be avoided, and which are preferable.

Contacting product manufacturers to confirm which plasticizers, stabilizers, and types of recycled content are present is also a good practice.

Plasticizers:

Plasticizers are additives that make vinyl flexible.

Avoid Orthophthalates	Prefer The Alternatives
<p>Diisononyl Phthalate <i>Abbreviated as:</i> DINP <i>CAS number:</i> 68515-48-0 or 28553-12-0 <i>Brand names:</i> Jayflex, Palatinol</p> <p>Di(2-ethylhexyl) Phthalate <i>Also known as:</i> Dioctyl Phthalate, Diisooctyl Phthalate, or Di-n-octyl Phthalate <i>Abbreviated as:</i> DEHP, DOP, DIOP, DnOP <i>CAS number:</i> 117-81-7</p> <p>Diisodecyl Phthalate <i>Abbreviated as:</i> DIDP <i>CAS number:</i> 68515-49-1 or 26761-40-0</p> <p>Dibutyl Phthalate <i>Abbreviated as:</i> DBP <i>CAS number:</i> 84-74-2</p> <p>Butyl Benzyl Phthalate <i>Also known as:</i> <i>Abbreviated as:</i> BBP <i>CAS number:</i> 85-68-7</p>	<p>Diisononyl cyclohexane-1,2- dicarboxylate <i>Abbreviated as:</i> DINCH <i>CAS number:</i> 166412-78-8 or 474919-59-0 <i>Brand names:</i> Hexamoll</p> <p>Dibenzoate blends <i>CAS number:</i> 27138-31-4 or 120-55-8 or 120-56-9 <i>Brand names:</i> Benzoflex</p> <p>Di-(2-ethylhexyl) terephthalate <i>Abbreviated as:</i> DEHT, DOTP <i>CAS number:</i> 6422-86-2</p> <p>Dibutyl terephthalate <i>Abbreviated as:</i> DBT <i>CAS number:</i> 1962-75-0</p> <p>Vegetable oil-based <i>CAS number:</i> 8013-07-8 or 68082-35-9 <i>Brand names:</i> Ecolibrium</p> <p>Acetylated monoglycerides of fully hydrogenated castor oil <i>Abbreviated as:</i> COMGHA <i>CAS number:</i> 736150-63-3 <i>Brand names:</i> Grindstead Soft-n-Safe</p> <p>Isosorbide diesters <i>CAS number:</i> 1215036-04-6 <i>Brand names:</i> Polysorb</p>

Stabilizers

Stabilizers prevent decomposition of vinyl compounds during processing and products during service.

Avoid Heavy Metals	Prefer The Alternatives
Lead-based Cadmium-based Tin-based (also referred to as Organotin, or Tri-butyl Tin)	Barium/Zinc-based Calcium/Zinc-based

Recycled Content

Recycled content from uncontrolled sources can introduce hazards into vinyl products. Sometimes manufacturers use low-cost recycled vinyl as filler and do not disclose its presence.

Avoid Uncontrolled Recycled Content	Prefer The Alternatives
Unspecified post-consumer recycled vinyl	Companies that disclose whether product ingredients are from recycled sources , and if so, publicize their methods of screening for toxic content. Manufacturers of products containing recycled content should ensure that toxic substances along for the ride are not present in concentrations above thresholds of concern. Pre-consumer (post-industrial) recycled vinyl free of phthalates and toxic metals.