



# VINYL. KNOW THE FACTS.

Vinyl is the world's most thoroughly researched and widely used plastic. It can be used to make everything from intravenous tubing to flooring – vinyl is extremely versatile. However, the facts about vinyl are not always correct and are often skewed to make it appear less sustainable and more dangerous. Know the facts about vinyl by reading some of the most common misconceptions.

#### Myth: Vinyl off gasses and has lots of VOCs.

Fact: Every product, regardless of what it is made of, off gasses. Vinyl is no different. Altro safety flooring has been tested to the CA 01350 standard, the basis for FloorScore and other programs and reports low VOC emissions. Altro Whiterock has also been tested and is so low, that it falls below detectable limits.

#### Myth: Vinyl emits dioxins, which are bad for the environment.

Fact: Dioxin is the name of a family of chemical compounds that are unintentional by-products of industrial, non-industrial and natural processes usually involving combustion. It is an environmental pollutant.

Vinyl is an extremely small source of dioxin, so small that levels in the environment would be essentially unchanged even if vinyl were not being manufactured and used every day in important products. The vinyl industry has studied and worked to reduce its contribution to dioxin. In fact, vinyl manufacturing creates on the order of seven grams of dioxin each year. That is 7 out of the 1,422 produced each year. Other dioxin sources include forest fires, volcanoes, burning wood in fireplaces, exhaust from diesel-powered vehicles and manufacturing of other building materials. Overall, dioxin levels in the environment have been declining for decades, according to data from the U.S. Environmental protection agency (EPA), and are now approximately 7 times less than what they were in 1987. During this time, production and use of vinyl have more than tripled. Clearly the source of dioxins is not PVC.

#### Myth: PVC includes DEHP and other unhealthy phthalates.

Fact: Altro safety flooring products have NEVER contained DEHP and, since January 2011, no longer contain phthalates. Instead we use a renewable, bio-based plasticizer derived from maize to make our flooring flexible. Altro Whiterock is a rigid, unplasticized PVC, and therefore has never contained phthalates.

#### Myth: PVC contains heavy metals & toxic ingredients.

Fact: Altro safety flooring does not contain lead, cadmium or any other heavy metals such as hexavalent chromium. It also is free of formaldehyde, a known carcinogen, found in most composite wood products like particleboard and plywood. Formaldehyde is also commonly found in carpeting.

#### Myth: Vinyl isn't safe.

Fact: Vinyl is one of the most researched and tested plastics. It has been successfully used for over 40 years in healthcare as critically important products such as IV tubing and blood bags.

#### Myth: Vinyl can't be recycled.

Fact: More than 1 billion pounds of vinyl are recycled annually. Due to the aggressive nature of Altro's slip-resistant aggregate particles, recycling was once thought to be impossible, but in 2007 Altro launched the world's first in-house safety flooring recycling machine. Now Altro recycles more than 500 tons of vinyl factory waste every year which are recycled downstream into traffic cones.

With the addition of Recofloor and Recowall, Altro has been able to recycle more than 6000 tons of flooring and 100 tons of Altro Whiterock since the program began in 2009.

#### Myth: Vinyl is dangerous in building fires

Fact: Vinyl is inherently flame retardant and once you remove the flame source it will self-extinguish. This is one of the reasons that vinyl is an excellent choice for electrical conduit. In a large building fire vinyl will burn and, like any organic material, generate toxic substances. When vinyl burns, it produces hydrogen chloride. HCL has a very pungent aroma and may quickly alert people to the presence of a fire unlike carbon monoxide, which is odorless and known as a silent killer.

#### Myth: Vinyl is not safe to incinerate.

Fact: Any waste containing chlorine including food waste and wood has the potential to generate dioxins during the incineration process. The operating conditions in modern municipal incinerators are closely controlled allowing waste vinyl to be safely incinerated without the generation of dioxins.

### Learn more facts

- [www.altro.com/us/sustainability](http://www.altro.com/us/sustainability)
- [www.vinylplus.eu](http://www.vinylplus.eu)
- [www.pvc.org](http://www.pvc.org)
- [www.recofloor.org](http://www.recofloor.org)

VINYL COMES FROM TWO SIMPLE BUILDING BLOCKS:  
**SALT (57%) AND OIL (43%)**