

## **PVC Factsheet**

Around homes and offices PVC is used in a wide range of products – pipes for our fresh water, drainage pipes, floor coverings, window frames, furniture, cabling, toys, pool membranes, kitchen doors and cabinetry, wall cladding, drink bottles, credit cards and cling wrap.

Not surprisingly, PVC is the one of the most common plastics in the world. It stands for Polyvinyl Chloride and is made through a combination of chlorine (derived from industrial grade salt) and carbon (derived predominantly from oil and gas via ethylene). Unlike other plastics such as PET, PE and PP, which are totally dependent on non-renewable oil or gas, PVC can be regarded as a natural resource saving plastic.

PVC has many other benefits:

- Cost effectiveness – low costs of raw material and ease of production often make PVC products a competitive option.
- Durability – PVC never rots or rusts and is extremely tough and resilient.
- Heat resistance – PVC withstands relatively high levels of heat without deterioration.
- Low maintenance – usually a dry cloth will be enough to clean down a PVC surface.
- Flame retardant – flames go out once a fire source is removed from PVC, meaning that PVC can be considered to be self-extinguishing.
- Recyclability – there is an Australian PVC recycling facility in Geelong, Victoria. Here PVC is recycled into many products including shoe soles and roadside reflector posts.
- Low in Volatile Organic Compounds (VOCs) – PVC is much lower in VOCs than most 'low VOC' paint products.
- Impervious to water and many other liquids – making it perfect for areas exposed to moisture.

## **The GBCA & PVC**

Since its inception the Green Building Council of Australia (GBCA) encouraged the minimisation of all PVC use in green buildings. However, after an 18 month review process the GBCA released a Draft Green Star 'PVC' credit in January 2010 which recognises that “the substitution of PVC did not necessarily deliver an improved environmental outcome for the built environment, as the use of some non-PVC alternative materials did not always guarantee a better environmental outcome.”

A series of expert reference panel meetings, site visits, discussions with stakeholders, and examination of international studies had shown that the lifecycle of PVC, from raw materials and production through use to end-of-life, recycling and disposal has changed considerably in the past five years.

Sources & Further Reading:

[www.vinyl.org.au](http://www.vinyl.org.au) – the website of the Vinyl Council of Australia

[www.pvc.org](http://www.pvc.org) – website of The European Council of Vinyl Manufacturers (ECVM)

[www.gbca.org.au](http://www.gbca.org.au) – further reading and a detailed background and references supporting the Green Star PVC credit