POLYFLOR
SOUTH AFRICA

A cradle to grave analysis: Are vinyl floors environmentally responsible?

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Are our vinyl floors environmentally responsible?

Historically vinyl flooring developed an unwarranted reputation as being 'environmentally unfriendly'.

However, thanks to proper analysis and work done by the **Southern African Vinyl Association (SAVA)**, vinyl has been given the **'environmental thumbs up'** by the **Green Building Council of South Africa (GBCSA)** and other organisations in SA and around the globe.

SAVA Southern African Vinyls Association — GREEN BUILDING COUNCIL SOUTH AFRICA

The most effective and accurate environmental impact analysis of a product is done using **a 'cradle to grave' approach and includes an analysis of all stages in the life-cycle of a product.** Whilst most vinyl products have good environmental ratings, some are better than others. Polyflor, globally and in SA, are commited to bringing you an environmentally sustainable product.

Polyflor's cradle to grave analysis:

1. Sourcing raw materials

Vinyl is made up of **57% salt (chlorine) and 43% oil (ethylene)**, salt being one of the world's most abundant natural resources. All raw materials used in the manufacture of Polyflor vinyl flooring are responsibly sourced from the closest possible suppliers and purchased in bulk to minimise the transport impacts. Like Polyflor, our suppliers are **ISO 14001 certified** or demonstrate robust environmental management.

Polyflor floorcoverings **predominantly use sustainable materials**.

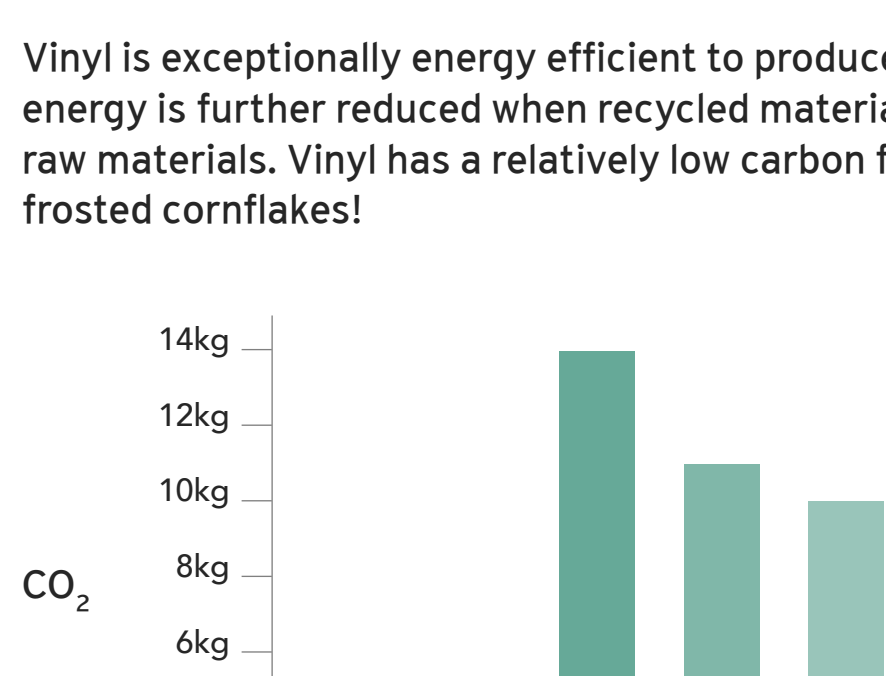
As an example, our homogeneous range of products USE UP TO **85%** sustainable materials with the average being 71% across the range.

2. The manufacturing process

Vinyl's manufacturing process is the **least energy intensive** of all flooring products.

Vinyl requires less energy to produce than other plastics, at least **15% less energy than linoleum** and **50% less energy than ceramics**, due to linoleum and ceramics' lengthy processes in 'ovens'.

Vinyl is exceptionally energy efficient to produce, and embedded energy is further reduced when recycled material is used in place of raw materials. Vinyl has a relatively low carbon footprint; the same as frosted cornflakes!



Carbon footprint

Polyflor follows the strictest industry regulations ensuring **no harmful substances**, such as formaldehyde, lead, cadmium, mercury or hexavalent chromium are included in our vinyl.

ALL POLYFLOR PRODUCTS ARE **REACH COMPLIANT**
(Registration, Evaluation, Authorisation & restriction of Chemicals)

3. Packaging

Polyflor flooring is packed in the most effective manner to provide necessary protection, whilst **minimising waste**. Recycling of various elements of our packaging waste is organised on site, with recycled packaging used where possible.

RECYCLED PACKAGING
used where possible

4. Distribution & transportation

Vinyl flooring is much lighter compared to other flooring materials, allowing reduced fuel consumption in transit.

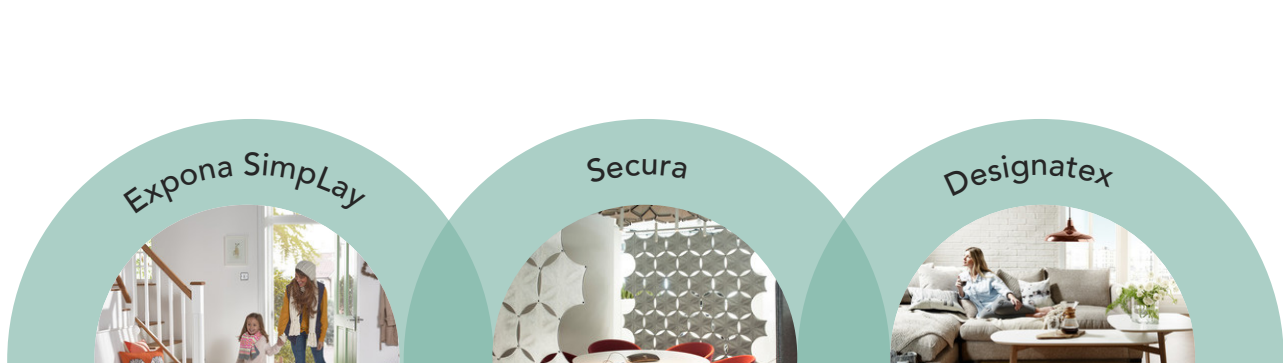
As a UK manufacturer, Polyflor distributes products from its central distribution centre in the North West of England through a network of wholesalers throughout the UK and around the world, a model that ensures efficiency through the transportation of full, bulk loads.

Polyflor operates its own transport fleet in the UK which is maintained and updated as often as possible to ensure the most fuel-efficient vehicles are used. Further reductions of the fleet's environmental impact are achieved by improving driving efficiencies, using the shortest routes possible and increasing bulk loading and backhauling volumes.

Polyflor SA ensures sustainable transport of goods wherever possible.

5. Installation

Polyflor continues to **develop and improve installation methods for its flooring ranges**, with increased use of solvent-free adhesives and adhesive-free vinyl flooring, such as Camaro Loc, Expona SimpLay, Secura and Designatex. The added **benefit of adhesive-free flooring is the ability to recycle and reuse the product**.



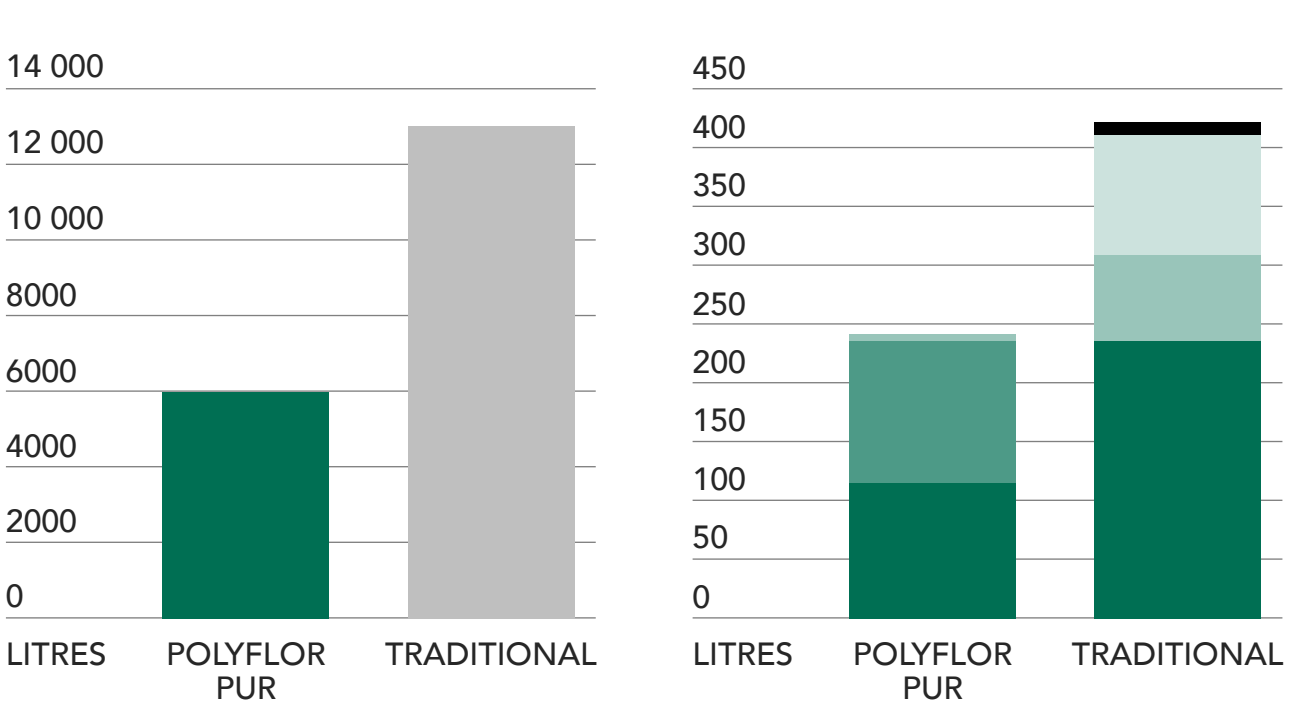
Examples of adhesive-free vinyl flooring

6. Maintenance

The 'in-use' phase of any flooring accounts for 80% of its environmental impact. Factors such as the sustainability, cost and efficiency of cleaning methods and cleaning products need to be considered.

Most Polyflor products are designed with low-maintenance features including a (Polyurethane) PUR reinforcement coating which ensures superior cleaning benefits, enhanced protection and optimum appearance retention. The PUR coating is **environmentally sustainable ensuring less use of energy, polish, water and cleaning chemicals**.

A PUR COATED FLOOR reduces lifecycle maintenance costs by up to **>48%** over 20 years compared to untreated floors.



55% LESS WATER — POLISH FREE FOR LIFE

7. Durability

Vinyl offers **excellent durability**. The longer a product lasts the less energy and other resources are needed to make, deliver and install a replacement. The official life cycle of vinyl is 20-25 years but with excellent maintenance, **it can literally last a lifetime** and is naturally fire resistant.

LIFE CYCLE **25 +** extremely durable

8. Disposal of the product

Currently, in South Africa, no technology exists that can separate glue residue from vinyl floor, making recycling difficult.

However, **Polyflor South Africa does offer a 'first-of-its-kind' recycling initiative for vinyl off-cuts** (there is always wastage at site).

A SIMPLE 3-STEP PROCESS:

STEP 1
Collect your branded poly recycling bags from Polyflor SA

STEP 2
Fill the bags with clean vinyl offcuts collected during installation

STEP 3
Polyflor will arrange collection of the bags from the contractors' premises

We have arranged with the major recyclers of vinyl around the country to collect the material from our premises for recycling use in a wide variety of products, including traffic management products and gum boots.

Polyflor SA recently won the **INNOVATION IN PVC RECYCLING** award at the 2017 Vinyl SA Conference for this initiative.

See here

9. Air quality of the product

An important part of environmentally sustainable floors is their VOC emissions, which affect the air quality in a building.

FACTS

- All Polyflor ranges have passed key international standards, and independent and rigorous VOC tests and have approval certification for the following: **AgBB; Swedish B.P.D (FLEC test); Finland M1 test; GBCA Compliant (GreenTag approval); Afsset A+** and **FloorScore®**.
- The most recent test method by Eurofins is **'Indoor Air Comfort'**. This test method is the most comprehensive and stringent within the industry, worldwide, and tests for all known emissions. Polyflor products tested to date have achieved **Indoor Air Comfort Gold**.
- Along with positive VOC test results, there is **no evidence to suggest that vinyl flooring contributes to common allergies** such as asthma or dust allergies. Vinyl is non-shedding, and most allergies are caused by airborne dust.
- Polyflor products conform to health and safety standard **EN 14041 : 2004** via an E1 Declaration, which confirms that **formaldehyde is not used in any Polyflor vinyl products**.
- **Polyflor vinyl is favoured for its superior 'cleanability'** over other flooring products and is used in the **strictest of hygiene zones throughout hospitals**. An additional benefit of Polyflor's low maintenance PUR products is the **minimised VOC emissions** from reduced cleaning chemicals.

INDOOR AIR COMFORT eurofins GOLD CERTIFIED PRODUCT — floor score — ÉMISSIONS DANS L'AIR INTÉRIEUR A (A+ A B C)

Vinyl flooring is now recognised as one of the most environmentally sustainable floor choices. When choosing a floor, make sure your supplier can provide you with information on the full environmental impact for the lifecycle of the floor, cradle to grave.

For more detailed information on the sustainability of Polyflor's products please download the **Polyflor 2017 Sustainability Report**

See here