

BOLON

WHY WE USE PLASTIC

Our position on plastic in our flooring

In 1949 our founder came up with the idea to use scraps of nylon plastic and cotton to make rag-rugs. Since then, Bolon, and the world, has changed but the idea of an adaptable company with a sustainable mindset remains. Sustainability is, and will always be, part of our DNA. Plastic as a material and its industry on the whole, has over the last decades been the topic for debates and often highlighted as a major factor in climate change.

This information focuses on Bolon's position on plastic, our product and its content, the difference in types of plastic, fossil and bio-based raw material, recycling and more.

Why we use plastic

Bolon uses construction plastic, a very resource-efficient material. The light and strong material only require a few kilograms of material per square meter and is therefore excellent for our design flooring. The unique combination of light and strong adds to the great characteristics. Outstanding wear resistance in combination with water resistance keeps our flooring beautiful over long periods of time without the need for surface treatment. Low emissions during its entire lifespan and absence of phthalates make our product a non-hazardous flooring option, suitable for all kinds of spaces.



The content of our floors

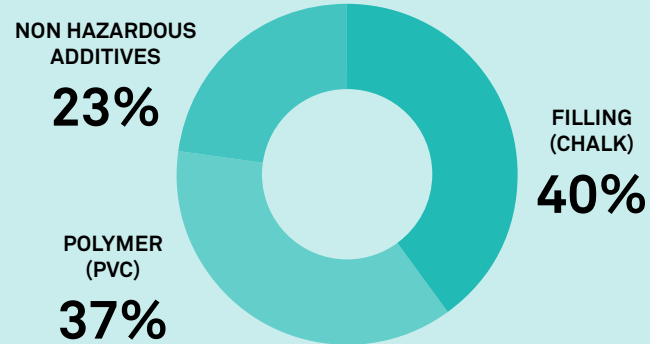
Bolon flooring contains PVC plastic as polymer, chalk as filling and non-hazardous additives. The average floor consists of 79 percent non-fossil material. The main ingredient, chalk, is non-fossil based as is the biggest part of the PVC which comes from salt. Furthermore, more than half of the additives consists of non-fossil material. The remaining 21 percent is fossil material coming from oil or gas.

All of our products contain on average 28 percent recycled material which is a mix of recycled filling, recycled additives and recycled PVC. So, to summarize, the majority of our product is non-fossil material, and all products have recycled content.

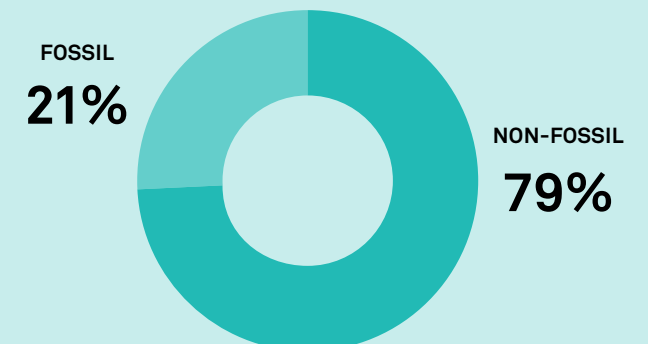
VIRGIN VS RECYCLED



MAIN INGREDIENTS



NON-FOSSIL VS FOSSIL





Construction plastic and pollution

The problem with plastic pollution in our seas is a serious global issue. But there is a clarification needed when it comes to the difference in plastics. The overwhelming majority of plastics found in oceans are disposable; bags, cups and other items produced for single-time use. In addition to these plastics fishing nets and microplastic from fleece garments, residue from car tires and certain cosmetic products create problems in the oceans.

Bolon however produces flooring out of construction plastic. This type of durable plastic can also be found in long-lived objects such as car interiors and buildings. Construction plastic does not contribute to the general pollution of oceans and the high wear resistance prevents the release of microplastics as our floors come with a 10-15 year warranty.

Plastic, climate change and recycling

Another major global issue is climate change. Due to its partial origin (oil or gas), plastic and its effect on climate change are subjected to constant debate. When fossil material like oil, coal and gas is burnt to produce electricity, heat or drive vehicles the results are carbon emissions that contribute to climate change. If not burnt, but instead used to produce materials with a long life span, there is no climate impact.

Plastics actually take part in the reduction of carbon emissions in many parts of society. The use of plastic enables food to stay fresh over longer periods, make cars lighter thus making them require less fuel. The wings on wind power plants are made light and strong. The list of plastics playing a positive role can be made long.

In today's society, the recycling of metals like copper and aluminium is standard practice. Just like plastic, metal is a finite resource and the circular mindset should be the same for both materials. Recycling is the way forward.

Today the two most common ways of dealing with waste, is landfills and the incineration for energy recovery. We see that the solution is a circular material flow where no waste is created. This will reduce our climate impact. At Bolon we have already implemented a circular mindset, and since 2014 we have recycled material in our products. To close the loop and be truly circular we have embarked on a journey where we explore the possibilities of taking back used floors in their entirety.



Fossil-based vs bio-based plastic

A current discussion is a transition from fossil-based plastic to bio-based plastic, as over 99 percent of the world's plastic derives from fossil sources. The importance of a transition to bio-based plastics is sometimes highlighted by the need for decreased carbon emissions. But there are challenges with the sources of raw material, for both fossil-based and bio-based. With its origin from crops or trees, bio-based plastic is facing the challenge of expanded fields of use. This is a concerning development since crops and trees have the natural ability to store fossil carbon, i.e. reduce climate impact. A global transition to this type of use will also have effects on biodiversity and food production. Oil and gas on the other hand are an efficient raw material for making plastic materials but for the climate a poor way to produce energy.

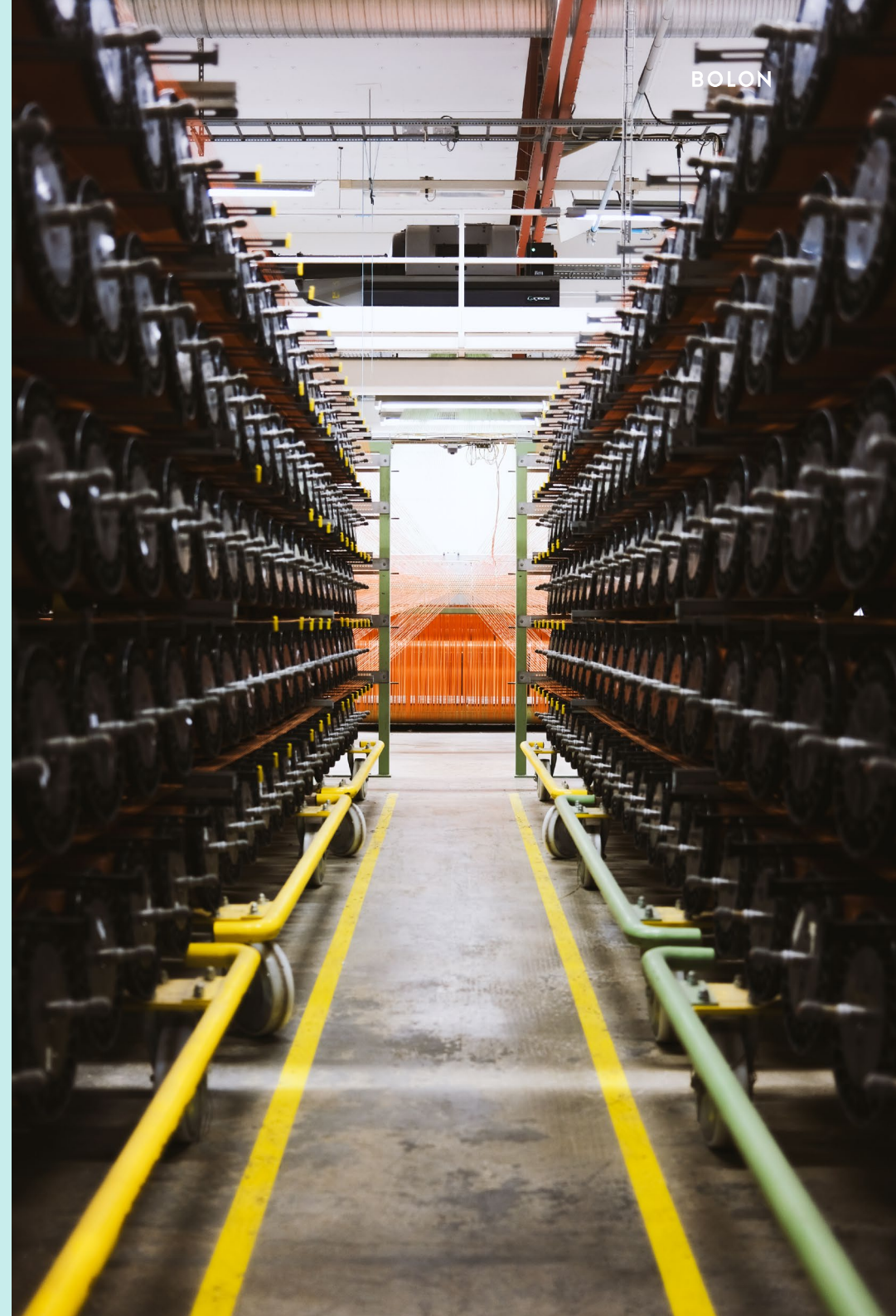
When it comes to material properties, there is no difference between fossil- and bio-based plastics. The waste problem and the need for recycling are the same. This means that the concept of a closed-loop is equally important when producing fossil or bio-based plastics as the difference lies within the building blocks of plastic, not the plastic itself.

Despite having fossil material in our product, we believe that the use of high-quality PVC, from environmentally labeled suppliers, will have a positive impact thanks to its durability. Our focus is on closing the loop for the material in our floors. This will make the biggest difference in reducing the Bolon climate impact.

PVC of today, and tomorrow

Throughout history the production of PVC has been linked to environmental problems. Thanks to technological advancements and a shift to non-hazardous additives modern PVC plastics are nothing like the early days and the problems are reduced. Today, the difference in environmental performance between different kinds of plastics is marginal. PVC has, from a climate perspective, a lower impact due to the use of salt as raw material. Furthermore, the advantages of PVC are many with durability, fire resistance and cleaning. Another positive property of PVC is the ability to recycle, which can be done many times over, with good quality.

Bolon uses environmentally labelled PVC, free of hazardous additives with low emissions during its lifespan. These are the reasons our floors are a sensible flooring option that is suitable for all kinds of spaces.



Summary

- › Bolon flooring are made from construction plastic, a resource-efficient and durable type of material
- › Bolon flooring consists of 79% non-fossil material and all of our products contain recycled material
- › Bolon flooring do not contribute to the pollution of seas
- › Bolon flooring does not release microplastics, thanks to our high durability
- › Oil and gas are an efficient raw material for making plastic materials but for the climate a poor way to produce energy
- › The way forward is recycling and a true circular mindset
- › There are challenges in producing both fossil-based and bio-based plastic as the waste problem and the need for recycling is the same for both
- › Bolon uses environmentally labeled PVC free of hazardous additives with low emissions during its lifespan and is therefore a sensible flooring option, suitable for all kinds of spaces
- › Bolon has a clear focus on a reduced climate impact with more recycled materials in our products and has embarked on a journey where we explore the possibilities of taking back used floors in its entirety