AMTICO BIO

amtico bio

Lower carbon LVT

amtico
flooring

A reduced carbon footprint, without compromising on quality.

MAKING FLOORING FIT FOR THE FUTURE

Reducing our impact starts with the products we make.

Which is why we're proud to introduce Amtico Bio, our first bio-attributed LVT flooring.

Made using renewable biomass for a lower carbon footprint. With the same great designs and quality you'd expect from Amtico.

AMTICO BIO

USING RENEWABLE MATERIALS INSTEAD OF FOSSIL FUELS

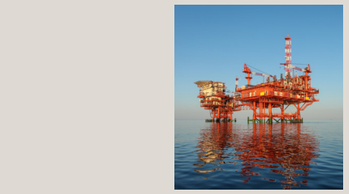
We use carefully selected and audited sources of biomass to create the renewable ethylene that goes into our bio-attributed PVC.

Non-food biomass is a renewable organic material that originates from sources such as perennial grass and fast-growing trees. When trees of this kind are used in the paper pulping industry, one of the by-products is Crude Tall Oil (CTO) which can be processed into many useful carbon-based chemicals, including ethylene, which is used in the production of renewable PVC.

Used Cooking Oil (UCO) is another waste product that is a source of renewable ethylene. It contains no impurities and performs in the same way as ethylene from Crude Tall Oil.

In both instances, the biomass-derived ethylene is combined with fossil fuel derived ethylene in a single manufacturing process to produce the chemically identical PVC resin Amtico uses to make its LVT flooring.

Traditional PVC Production



Bio-attributed PVC Production

NOT ALL BIOMASS IS THE SAME

All our biomass sources are by-products of other production processes e.g. trees are not cut down specifically to source Crude Tall Oil for ethylene. This shouldn't be confused with other processes like the production of wood pellets where trees are cut down specifically to create pellets to burn for energy production.

Similarly, processing used cooking oils (UCO) to create ethylene and other useful chemicals, actually improves problems of recycling and circularity as traditionally this oil would have been landfilled or disposed of in environmentally damaging ways. As the oil is already used in cooking, this also does not compete with food production.

MASS BALANCE PRINCIPLES

Our bio-attributed LVT is carefully managed using the mass balance principle.

Introducing bio-attributed PVC this way allows us to incorporate renewable raw materials into our existing manufacturing process, rather than creating a whole new manufacturing plant, keeping costs manageable for you and us.

How does Mass Balance work?

When you specify one of our collections as Amtico Bio, we simply source the required amount of bio-attributed PVC that would be needed to make that floor.

Green energy uses mass balance in the same way - some energy can be sold as ‘green’ as it has been generated by certified renewable sources, but is delivered via the same grid as non-green energy.

All the materials that go into our LVT manufacturing process are carefully tracked and measured and independently audited to achieve ISCC PLUS certification.

So we can be sure that when you specify Amtico Bio, you’re supporting the switch to renewable materials.

Watch the film to learn more about the process: **www.amtico.com/commercial/bio**

TRACKED, TRACED AND MANAGED FROM FOREST TO FLOOR

To ensure total transparency and peace of mind for customers, Amtico has been certified to offer bio-attributed LVT by the International Sustainability and Carbon Certification body (ISCC).

The ISCC chain-of-custody certification guarantees that every element along the supply chain is ISCC certified. This assures that all ISCC requirements have been met and any sustainability claims made by us and other manufacturers at the end of the supply chain are credible and trustworthy.

All customers purchasing Amtico Bio will receive a certificate to guarantee that Amtico has purchased PVC derived from Biomass and have followed the auditing process.

SGS

ISCC PLUS Certificate

Certificate Number: ISCC-PLUS-Cert-DE100-12801122
SGS Germany GmbH
Europa Allee 12, D-49685 Emstek
certifies that

The Amtico Company Limited t/a Amtico International

Kingfield Road 2303730
CV6 5AA Coventry
UNITED KINGDOM

complies with the requirements of the certification system

ISCC PLUS

(International Sustainability and Carbon Certification)

Place of the audit:
see above

This certificate is valid from 11/10/2022 to 10/10/2023

The site of the system user is certified as:
converter

The scope of the certificate includes the following chain of custody options:
mass balance

Emstek, 11/10/2022
Place and date of issue

SGS Germany GmbH
Stamp, Signature

The issuing Certification Body is responsible for the accuracy of this document.
Version / Date: 1 (no adjustments) / 11/10/2022

SPECIFY AMTICO BIO

Amtico Bio can be specified across standard planks and tiles in our Signature, Spacia and Form collections. The bio-attributed content varies across the collections. Please see the technical specs for more information.

You can be sure when you choose Amtico Bio, you're contributing to a sustainable future for luxury vinyl flooring.

Chemically and physically identical to our standard LVT

Lifecycle Analysis Model (LCA)

Environmental impacts per declared/functional unit (Cradle to Gate A1-3)

	Indicator	Unit	Signature	Signature Bio
GWP	Global Warming Potential (Climate Change)	kg CO2 eq.	$5.67e^{+0}$	$4.02e^{+0}$
ODP	Ozone Depletion Potential	kg CFC 11 eq.	$2.10e^{-7}$	$1.18e^{-6}$
AP	Acidification Potential (Soil & Water)	kg SO2 eq.	$2.27e^{-2}$	$3.65e^{-2}$
EP	Eutrophication Potential	kg $(PO4)^{3-}$	$5.92e^{-3}$	$1.50e^{-2}$
POCP	Photochemical Ozone Creation	kg C2H2 eq.	$7.37e^{-3}$	$4.67e^{-3}$
ADPF	Abiotic Depletion Potential (Elements)	kg Sb eq.	$3.20e^{-5}$	$2.91e^{-5}$
ADPF	Abiotic Depletion Potential(Fossil Fuels)	MJ eq.	$1.47e^{+2}$	$1.54e^{+2}$

	Indicator	Unit	Form	Form Bio
GWP	Global Warming Potential (Climate Change)	kg CO2 eq.	$5.18e^{+0}$	$3.74e^{+0}$
ODP	Ozone Depletion Potential	kg CFC 11 eq.	$2.07e^{-7}$	$1.05e^{-6}$
AP	Acidification Potential (Soil & Water)	kg SO2 eq.	$2.05e^{-2}$	$3.25e^{-2}$
EP	Eutrophication Potential	kg $(PO4)^{3-}$	$5.53e^{-3}$	$1.34e^{-2}$
POCP	Photochemical Ozone Creation	kg C2H2 eq.	$6.65e^{-3}$	$4.31e^{-3}$
ADPF	Abiotic Depletion Potential (Elements)	kg Sb eq.	$2.81e^{-5}$	$2.56e^{-5}$
ADPF	Abiotic Depletion Potential(Fossil Fuels)	MJ eq.	$1.35e^{+2}$	$1.41e^{+2}$

	Indicator	Unit	Spacia	Spacia Bio
GWP	Global Warming Potential (Climate Change)	kg CO^2 eq.	$4.80e^{+0}$	$3.63e^{+0}$
ODP	Ozone Depletion Potential	kg CFC 11 eq.	$2.05e^{-7}$	$9.74e^{-7}$
AP	Acidification Potential (Soil & Water)	kg SO^2 eq.	$1.94e^{-2}$	$3.05e^{-2}$
EP	Eutrophication Potential	kg $(PO4)^{3-}$	$5.23e^{-3}$	$1.24e^{-2}$
POCP	Photochemical Ozone Creation	kg C2H2 eq.	$6.09e^{-3}$	$4.05e^{-3}$
ADPF	Abiotic Depletion Potential (Elements)	kg Sb eq.	$2.58e^{-5}$	$2.38e^{-5}$
ADPF	Abiotic Depletion Potential(Fossil Fuels)	MJ eq.	$1.25e^{+2}$	$1.33e^{+2}$

Amtico products are usually supported with an Environmental Product Declaration (EPD) which calculates the environmental impact of a product's manufacture, use and disposal. For construction products the EPD requirements are set out in BS EN 15804:2012+A2:2019. However, this standard requires a full year of production data.

For a newly created product like Bio, we don't yet have a full year of data. Instead our in-house R&D team have created a Lifecycle Assessment (LCA) model. Using BRE's LINA software, our technical specialists can not only create the LCA, but they can also model the environmental impact of any changes in supply and manufacturing.

The LCA models opposite have been prepared for Signature, Form and Spacia made with both standard PVC and bio-attributed PVC. The parameters for the studies are as follows:

1. 2021 manufacturing data for the Kingfield Road, Covetry was used.
2. Cradle to Gate system boundary (A1-3) applied.
3. Raw material datasets were provided by Ecoinvent.
4. The model inputs included raw materials and transport to site, energy and water use, packaging, waste and disposal/recycling.
5. More than one product is manufactured at the Kingfield Road site. Energy and water consumption was located proportionally based on 2021 manufactured product mass.

amtico flooring

Amtico UK &
European Sales
Solar Park Southside
Solihull, West Midlands
B90 4SH, UK
+44 (0) 121 745 0800
samples@amtico.com

Read our full sustainability strategy at
amtico.com/wherewestand

amtico
flooring