

INNOVATION THROUGH COOPERATION, THAT IS WHAT SYNPRODO STANDS FOR.





ABOUT US

Synprodo is domiciled in Wijchen and Zwartsluis (NL) and is a top EPS and EPP expert Located in the field of packaging, industrial products, products for the heating and ventilation sector, food sector, horticulture and the pharmaceutical industry. We are the most experienced supplier in Western Europe and our strength is our ability to always surprise our customers with innovative solutions. We have access to the most advanced design facilities, ultramodern machines and professional R&D departments that enable us to transform almost any customer demand into an excellent product. Moreover, as you would expect from a quality supplier, we apply the very highest quality standards.

INTERNATIONAL NETWORK

Synprodo was founded on April 1st, 1953, in Wijchen under the name Isola N.V., a company that insulates refrigerated vehicles and freight cars. A year later, Isola started processing polystyrene and changed its business name to 'Synprodo BV'. The focus continues to be on insulation materials, but now made of expanded polystyrene (EPS). In the Wijchen branch location, Synprodo produces EPS products for diverging applications. It also manufactures products for its sister company Isobouw here. The Zwartsluis branch location manufactures products made of expanded polypropylene (EPP).

In 2018, Synprodo became part of the BEWI Group, one of the top leading suppliers in the field of packaging, technical components and insulation solutions. The head office of the holding is located in Solna, Sweden, and the BEWI Group is active in almost 80 locations in Europe with a total of more than 3,900 employees.



OUR VISION

The packaging and technical components industry is a market in which creativity and a high level of quality are a must for achieving success. Our customers consequently not only expect us to supply them with a product, but with a total concept in which contributing ideas and professional support are key factors.

Through our continuous focus on new technologies and the development of distinctive, price-competitive and sustainable products, we are constantly able to meet these high expectations. Intensive cooperation with our customers is of crucial importance in this respect. We give substance to new ideas that we conceptualise together with our customers. This is where our strength lies. By inspiring and challenging each other, we arrive at innovative product solutions together. On the basis of our comprehensive expertise, design facilities, state-of-the-art machine park and extensive know-how in the area of material applications and surface techniques, we aim to maintain our position as expert within Europe. And given our ambition, we aim to further expand our position where possible. Through innovation and contributing ideas, we are capable of constantly exceeding our customers' expectations each and every time.

THE GROWING WORLD OF SYNPRODO

Synprodo is active in a wide range of diverse fields. Our customer base is highly diverse, and products range from child seats to the housings of heat pumps. Products also range from trays for the horticultural sector to cargo bikes and from insulation material for the construction sector to packaging for consumer products. We are uniquely capable of coming up with the most innovative and creative solutions every time. Our customer base includes many A-brands, but many other companies also know where to find us and appreciate our professional support and creativity. They look for a partner who is quick to understand their needs.

A supplier who is able to initiate and implement new developments. The EPS and EPP fields of application are steadily becoming broader and more extensive. Thanks to innovative surface treatments, this enables us to design and produce not only highly functional products, but also give them a unique appearance. As a result, traditional pipe casings, such as metal casings, are being replaced by EPP. Given this new area of application, the product is ready for the future!

EPS

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EPS UNPRECEDENTED FREEDOM OF FORM AND INDEFINITELY REUSABLE



EXPANDED POLYSTYRENE (EPS)

It is commonly known as styrofoam, but what is it really? EPS is 98% air and 2% solid material, which makes it extremely lightweight. The production of expanded polystyrene starts off with pre-expansion, whereby polystyrene chips are impregnated with a foaming agent and expanded using heat. This causes the foaming agent to evaporate and air to enter the chips, as a result of which they are blown up to 50 times their original size. The chips are stored until they reach equilibrium, after which they are blown into our large block moulds or shaped in one of our moulds.

PERFECT FOR PACKAGING

The air locked in the cells gives EPS excellent thermal insulation properties against heat, cold and moisture. It is watertight, resistant to UV radiation, non-toxic and hygienic (moulds and bacteria cannot grow on EPS); these factors together keep food fresh and reduce food waste. EPS's excellent shock absorption makes it extremely suitable for protecting packaged products. EPS is available in many colours and due to its flexible properties can be supplied in any three-dimensional design. Even the smallest detailing is possible, thus guaranteeing total freedom of form and design.

EPS is used to protect medicines, electronic consumer goods, technical components and the like. It is also used to package fish, vegetables, fruit, home-delivered groceries and pizzas, and other fresh food. Moreover, EPS is also used in bicycle helmets, car seats, decorating panels and furniture.



SECTOR HORTICULTURE

The ability to provide the right insulating value make EPS seed and propagation trays extremely suitable for the propagation and cultivation of young plant material. It facilitates constant temperature management for the roots and the tray's snow-white colour promotes growth. They retain their shape, are strong, lightweight and can be supplied in virtually any dimension. Over 90% of EPS horticultural trays are reused or recycled and Synprodo is only too happy to encourage this. For example, we pick up used trays in our own region and use them to produce new products. EPS is a sustainable and valuable raw material and, provided it is properly sorted when collected, it can be 100% recycled into new EPS products. Synprodo carries out the entire recycling process internally, thus completing the circle: from raw material production to reuse.



SECTOR PHARMACY

The pharmaceutical industry, in part through means of regulations, imposes high demands on packaging materials. EPS has all of the properties needed to meet these strict requirements. For example, EPS protects glass bottles against breakage during transport, and by using perfectly dimensionally stable EPS packaging, pharmaceutical products can be filled mechanically. Furthermore, EPS has excellent insulating properties, which prevents contents from quickly heating up and the material is consequently extremely suitable for use in coolers. This is why EPS is used on a large scale in cold chain solutions, for example for -79°C dry ice shipments and 2-8°C refrigerated shipments. The EPS material is impervious to moisture and retains its excellent properties in any climate in contrast to some other materials, such as cardboard. Synprodo has an elaborate standard product range, but should you require a more custom-made solution, our R&D department is happy to work with you to develop it. Aside from EPS, EPP and Neopor also are extremely suited for pharmaceutical applications. We are happy to provide you with advice on the basis of your specific needs.



EPP

EPP UNIQUE AND VERSATILE

EXPANDED POLYPROPYLENE (EPP)

EPP is a closed-cell thermoplastic foam with a density that can be tailored to any application or purpose. It has superior energy absorption, high resilience and excellent acoustic and thermal insulation properties. EPP absorbs hardly any water, is resistant to chemicals and oils and is easy to clean. It is primarily used in the climate control and automotive industries. Despite its low weight, EPP has a high energy absorption and strong recovery capacity following static or dynamic loads. Its deformation is equally distributed independent of the direction of impact. EPP's product density can be specifically adjusted in line with its application or use. Another benefit is that EPP is highly recyclable and contains no CFC or other propellants. Our product range also includes EPP-RE with 25% recycled content. Should you wish to opt for EPP with 15% recycled content, you can choose the light-green 'EPP Ocean'.



CLIMATE CONTROL AND HVAC

EPP is low weight, has high insulating properties, can be used in construction and is virtually watertight. These are but a few of EPP's properties that are a prerequisite for the climate control sector. The climate control industry is making increasingly more innovative use of expanded plastics. Until a few years ago, applications were primarily technical in nature, while today EPP is also used cosmetically. Through means of various techniques, including an innovative click system, EPP can be sealed virtually airtight. By adding a (laser) structure inside the mould, the expanded plastic's exterior becomes attractive and durable, and this makes it possible to eliminate conventional materials used traditionally, such as steel and thermoplastics. During production and assembly, components can be pre-mounted, if desired, such as inserts or a condensate drain. These possibilities and production properties make EPP a perfect solution for the production of technical components for heating boilers, heat pumps, boilers, district heating, heat recovery units and ventilation systems, among others. Together with you we also continue to look for the most optimal solutions to your problems in this sector.





CRADLE TO CRADLE

For Synprodo, 'cradle to cradle' is not just a term, it is a philosophy that is part of our daily business operations. We are aware of our responsibility relating to the environment and through continuous innovation devote our efforts to this. By embracing the cradle-to-cradle philosophy we focus on sustainable product development. We do this by selecting the most environmentally friendly option in each phase. Thanks to the innovation of our raw materials supplier, sister company BEWI RAW in Etten-Leur in the Netherlands, we have succeeded in making the production of the EPS raw material sustainable. In the past, the waste flow from this production process had to be removed, but since 2006 this slurry has been used as a filler for certain types of polystyrene granulate. Furthermore, we attempt to as much as possible make the production process for EPS blocks and moulded parts sustainable. Together with all of its Dutch sister companies, Synprodo uses green electricity that is 100% generated using wind turbines.



EPS-RE

EPS-RE INDEFINETELY REUSABLE



OUR SUSTAINABILITY PROMISES

Our goal is to be a circular company built on renewable energy by 2030. Although our EPS is of high quality and long-lasting, the day will come when it becomes waste. Partly by working closely with our customers, we do everything we can to complete the circle when EPS products reach the end of their service life.

WHY RECYCLE YOUR EPS?

Although we all know why recycling is a good thing, here are some of the reasons why recycling is so important:

- It is good for the environment
- It is cost-effective
- It gets you closer to the carbon reduction targets for 2030
- It is safe

In other words, it is a win-win solution

A NEW LIFE

Once collected, the EPS waste is processed in such a way that it can go back into the manufacturing chain, so that it is given new life as EPS-RE. This material consists of 100% recycled EPS. This makes us unique in the world! When you choose EPS-RE, you choose an even more sustainable product whose carbon emissions alone are around 40% lower than those of regular materials. That's an excellent reason to choose EPS-RE!

BIOFOAM®

Syn BioFoam[®] consists of biopolymers produced from organic materials. We have succeeded in making foam from expanded chips on the basis of polylactic acid (PLA) derived from plant-based waste. It is the first and Ō only biological foam material in the world and has also been awarded the cradle-to-cradle certificate. In accordance with the cradle-to-cradle 70 principle, BioFoam[®] products can be recycled indefinitely without loss of quality. A patented technology facilitates heating and expansion; this has B≘v resulted in the development of a new type of packaging material that is

REDUCED CO_ EMISSIONS The production of BioFoam[®] results in a further reduction of CO₂

fully biodegradable.

FULLY COMPOSTABLE

emissions. Although the energy requirements for the production of traditional EPS are the lowest of all plastics, the total CO₂ emission is drastically reduced even further in the production of BioFoam[®]. By producing BioFoam, Synprodo by contributes to reducing the depletion of fossil raw materials.

WIDE RANGE OF OPTIONS

With properties similar to EPS, BioFoam[®] is an excellent material for protection and insulation. BioFoam[®] is equally impact-resistant and is used in moulded parts, as well as (contour) cut products. In addition, BioFoam is used as a filler in beanbags. This results in a wide range of technical products and packaging solutions with unprecedented freedom of form.

BIOFOAM® IT DOESN'T GET MUCH GREENER **THAN THIS!**



SUSTAINABILITY

Sustainability is a high priority for Synprodo. We devote our efforts to protecting and preserving our planet for future generations. To realise our promises, together with our holding, BEWI Group, we have developed a strategic plan for the future, based on our goals. This plan contains clear targets to which we are committed for 2030. Here we would like to explain to you what these promises are.

PROMISE 1

TO BE CICRULAR

Synprodo by considers circularity to be one of its most important priorities. Through its connection with the BEWI Group, Synprodo is part of the desired circular value chain. Together with BEWI, we ensure that the market makes optimal use of raw materials. Together with all of its Dutch sister companies, Synprodo uses green electricity that is 100% generated using wind turbines.

Generating this energy therefore does not make use of environmentally harmful fossil fuels and barely releases any polluting substances. Our goal is to reduce the use of fossil fuels by 50%; materials such as EPS-RE and BioFoam offer a unique opportunity to achieve this target. We stand out in the market, because we only use EPS as a mono material in our products. This makes recycling very easy.

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PROMISE 2

ACTIVELY COOPERATING WITH OUR PARTNERS

We aim to be an active and responsible partner, so that together with our stakeholders, we can achieve a circular economy. The transition to a circular economy requires a systematic shift and a fundamental reconsideration of the way in which we produce, use and reuse products. It requires collective actions throughout the entire chain, by governments and civil society. We are making a start on this now in our organisation by having our R&D department and laboratory actively cooperate with our customers in order to optimise products on the basis of their specific requirements. Our motto is: we cannot do this alone and so we do it together.



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PROMISE 3

CONTRIBUTING TO AN INCLUSIVE SOCIETY

We aim to create a positive, social impact for everyone. As a company within the BEWI Group, Synprodo plays an important role in securing an inclusive society by being a responsible employer, cooperative partner and neighbour. For example, we participate in World Cleanup Day and Operation Clean Sweep. The objective is to keep our own premises clean and to prevent our waste from ending up in the environment. In our day-to-day operations, this manifests itself by being mindful of our employees. Their well-being and development within our company are paramount in this respect.

SYNPRODO BV

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SYNPRODO BV PRODUCTIELOCATIE BESTO

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