

Press release Polyphen®



Date: 2nd November 2021

Fire safe Insulation: First European Polyphen® licensee for a patented Australian invention.

Polyphen® is a rigid thermal insulation foam, which combines good mechanical properties with excellent fire resistance. It can be used in a wide range of applications including external wall insulation, sandwich panels, lagging of pipes, ducts, tanks, as well as residential and commercial construction.

Properties and markets

Polyphen® is an engineered mix of EPS and phenolic resin which combines excellent fire, compression, and insulation properties. Polyphen® is produced in a one-step low cost, low investment, low emission batch process using unexpanded EPS beads and a special phenolic recipe. Abrasive wire cutting is needed to shape blocks and/or cut into sheets. Polyphen® insulation can be fully recycled.

Invented and developed in Australia; Polyphen® has multiple licensees including China, Thailand, South Africa, New Zealand, and Australia. Polyphen® is now entering the EU. The first EU licence has been granted to Termokomfort Europe bv who are based in the Netherlands. Nicholas Hughes, CEO of Polyphen® commented: "It is great to see that an Australian invention is receiving recognition in Europe, as a novel fire-resistant building product that is capable of achieving FM Global Class 1 accreditation when used as part of a construction system".

Various SBI fire classes can be met at will, showing promise for sandwich panels, ETICS, Fire belts (Brand Riegel) and flat roof PV systems. Polyphen® has an extremely low smoke emission and is superior to PIR/PUR as well as EPS. Frank Koster, CEO of Termokomfort stated that: "This proves that Termokomfort is committed to insulation and protection as being the first to insulate cavities in the Netherlands and now, again, leading the industry with a fire safe insulation." The preparation for start-up is ongoing and production will commence in the first quarter of 2022.

Polyphen® can pass an E84 tunnel test whereas PIR/PU cannot be due to the large amount of toxic smoke and or fire driven off during testing. Unlike EPS, conditioning of material is not needed to achieve fire properties which improves building and workplace safety. Polyphen® can be produced in multiple formats including FM40 which exhibits good non-flame spread properties and Polyphen® FR50 which demonstrates an even better flame stoppage. Polyphen® has recently achieved a 90-minute fire rating when evaluated to ISO 476-24 which is the equivalent to ISO 834.

Jan Noordegraaf, director of Innograaf commented: "We are reaching out to the established network of EU wide EPS converters, and it seems that a quick acceptance in other parts of Europe is only a matter of time." Subject to being uncommitted geographic exclusivity can be granted to a licensee. A first-hand EU based experienced specialist assists in start-up of licensees.

About:

Termokomfort Europe BV is based in Almere, Netherlands and is the leading Dutch insulation company for development, manufacturing, and marketing of polystyrene foam cavity wall insulation. mail: frank@termokomfort.nl Tel: +31 (0)36-53 87 558 www.termokomfort.nl

Polyphen International PTY. Ltd. is based in Victoria, Australia. Polyphen® is engaged in the development and marketing of high-performance fire-resistant Phenol resin / EPS mixtures. mail: info@polyphen.com Tel: +61407 040 041 www.polyphen.com

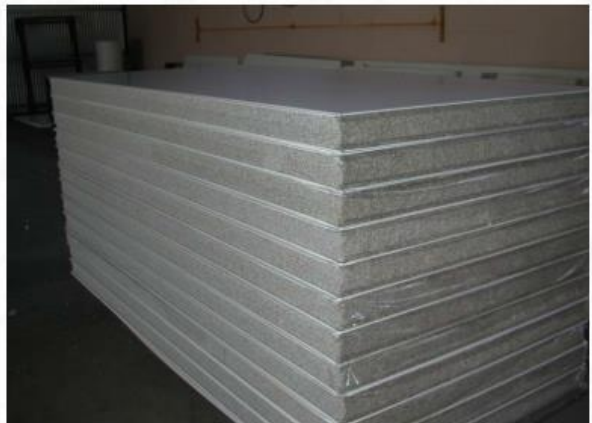
Innograaf B.V is based in Wijchen, the Netherlands and is the European agent for Polyphen®. Innograaf provides support for value chain cooperation, and application of sustainable processes and materials, both bio- based and fossil- based. Mail: innograaf@gmail.com Tel +31(0)6 22 46 70 44.



A torch does not get through Polyphen®



Rendered Wall with Polyphen®



Steel Clad Panels with Polyphen®