

Product Safety

DIFFERENCES IN GLASS WOOL, FIBRE GLASS & ASBESTOS INSULATION

In the casual use of everyday language over time, confusion has occurred with the different types and uses of insulation material. The following information aims to clarify the differences and correctly associate Pink® Batts® insulation as a glass wool material.

Glass wool

Glass wool is used internationally as thermal and acoustic insulation in homes, schools, hospitals, commercial buildings, industrial plants, vehicles and white goods. It is a coloured mat of non-crystalline fibrous material made from recycled window glass (up to 80% in New Zealand) melted and bound together by resin, hence the name glass wool. Pink® Batts® insulation is only made from glass wool which has bio-soluble properties (i.e. if glass wool is inhaled into the lungs, it will dissolve in the body fluids and be cleared from the body), and is non classifiable as carcinogenic to humans (the same classification as caffeine, chlorinated drinking water and hair colouring).

Fibre glass

Fibre glass is a fibre reinforced composite plastic commonly used in construction and the manufacture of yachts, canoes, vehicle parts, light weight vehicles and household fittings. Fibrous materials are used to mechanically enhance the strength and elasticity of this composite plastic. There is no evidence that the glass fibres used in the composite industry are carcinogenic to humans, but unfortunately they have no bio-soluble properties. While these fibres are different to those in glass wool, it has in the past often been mistakenly identified with Pink® Batts® insulation.

Asbestos

Asbestos was once used commonly in the manufacture of roofing shingles, as insulation in walls and floors around wood burning stoves in homes and as a coating on hot water and steam pipes. Asbestos is the name for a group of natural minerals that are made up of many small fibres. These fibres are very strong and are highly resistant to heat, fire and chemicals. It was found in the 1970s to be a health hazard through inhalation of loose asbestos fibres and is a confirmed human carcinogen. Alternative products have been developed as substitutes. Pink® Batts® insulation has never been manufactured from asbestos material. Pink® Batts® insulation is only made from bio-soluble glass wool material.

Health and safety comparisons

Properties	Materials		
	Glass wool	Fibre glass	Asbestos
Non-carcinogenic <i>(Not classifiable as cancer-causing; similar to caffeine, tea, chlorinated drinking water and hair colouring)</i>	✓	✓	✗
Bio-soluble <i>(Inhaled fibres into the lungs, will dissolve in the body fluids and be cleared from the body)</i>	✓	✗	✗

Pink® Batts® insulation is manufactured from glass wool and is a safer product in comparison to fibre glass and asbestos.

Glass wool and good practice

Glass wool fibres can be a source of temporary skin irritation to some people. That is why the manufacturers recommend the wearing of protective clothing, such as long sleeves and trousers, as well as a facemask during installation. Loose fibres can be removed from the skin with luke warm water and mild soap.

Sources: International Agency for Research on Cancer; Code of Practice for Health and Safety in the Manufacture of Composites based on Synthetic Resins – Fibre glass; N.Z. Occupational Safety and Health Report Series No. 8: 2001.

This fact sheet may have been superseded. Please refer to www.pinkbatts.co.nz or call 0800 PINK BATTs (746 522) for the most current information.