

## Health, Safety and the Environment

### HEALTH AND SAFETY

EPS scores particularly highly when it comes to health and safety. It has many positive attributes, not the least of which is its proven safety record from production through useful life to recycling. EPS is non-toxic and biologically inert.

The material is not irritating to the skin or eyes; no medical treatment or action is required as a result of accidental ingestion.

No special precautions are required during handling or during cutting where carried out in a well ventilated area. Dust produced by cutting is very light and may cling to the skin or clothing through static electricity; it may be simply brushed away.

The volume of EPS boards is 98% air, consequently the components in a given volume are correspondingly low, typically 15 to 50 kg/m<sup>3</sup>. In polystyrene, styrene monomer, shown to be safe in use, constitutes up to 0.1% by weight of the product. This minute trace of styrene monomer constitutes no threat to health.

The expanding agent, pentane is a saturated hydrocarbon [not to be confused with (H)CFCs] and is non-toxic and constitutes no threat to the ozone layer. EPS Euroclass E, flame-retardant additive material, contains around 0.5% of the flame retardant hexabromocyclododecane (HBCD) which is entrapped in the polymer matrix of the EPS. The HBCD additive should not be confused with aromatic flame retardants (such as PBBs and PBBOs).

### ENVIRONMENTAL ISSUES

EPS does not contain or produce HCFCs, nor are these compounds used in its manufacture. In use, it is non-toxic, non-irritant and odourless. Due to the high volume and low weight of a lorry load of Fillmaster there are environmental advantages over traditional materials in reducing the number of lorry runs required to supply a contract. This can be particularly advantageous in built up environments. (90m<sup>3</sup> of EPS compared to typically 10m<sup>3</sup> of traditional fill per lorry load).

The low density of Fillmaster, which is typically 98% air, directly reduces the volumes of quarried materials required.

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