



**SOTECOSPA** **WEARFOAM**

**FenixFoam**



## FENIXFOAM

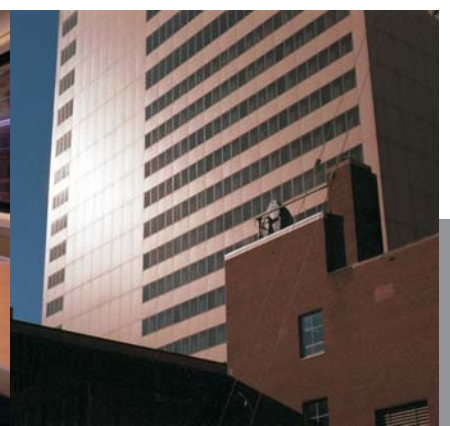
**SotecoFoam** has created **FenixFoam**, the innovative expanded structural foam constituted of fine closed cells suitable for transports, aeronautics, marine industries and for all those areas that require materials with strong fire reaction. In order to achieve **FenixFoam's** special formulation, different mineral charges have been used; these undergo an alteration in flame front, providing substances that direct the polymer decomposition towards the formation of graphitic-refractory substances. It follows an hindrance to fire propagation and the development of low-dense smokes.

**FenixFoam** is tested in certified laboratories regarding fire reaction according to the AFNOR rules for smoke opacity and gas combustion during pyrolysis. Because of its behaviour in fire circumstances, **FenixFoam** is classified in the MI and FI classes. When involved in fire, the development of **FenixFoam's** low-density smokes does not prevent anyone from reaching the emergency exits. Low toxicity is another very important quality of emitted smokes, because in such circumstances people are not inhibited in escaping from the place of the fire.

**Fenix** is produced with the use of neither halogens, nor substances of similar nature (unlike traditional self-extinguishing polyurethane materials).

Thanks to its nature and structure, **FenixFoam** can be combined with many different skin materials (plastics reinforced with fibers of glass, carbon, aramidic, metallic foils, etc.) using every kind of resin, in order to carry out sandwich panels with high rigidity and strength.

 **SOTECOFOAM**®  
FIRE SELF PROTECTING STRUCTURAL FOAM



## FEATURES

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- ✓ It does not transmit flames during pyrolysis reaction (MI class according to the AFNOR rules)
- ✓ It does not produce toxic substances when it is involved in a fire, developing very low-dense smokes (FI class according to the AFNOR rules)
- ✓ The result is reached by using new technologies without turning to the traditional anti-flame substances (which usually are halogens)
- ✓ **FenixFoam's** supply is in sheets of various thickness and density (from 60 to 400 kg/m<sup>3</sup>) for the realization of sandwich panels; the most suitable application is as thermal and acoustic insulating board for trains, subways, buses, etc.
- ✓ Lower densities (35, 50 kg/m<sup>3</sup>) can also find a good application in public buildings (cinemas, theaters, hospitals) where a high level of fire reaction is requested as well as a thermal and acoustic isolation
- ✓ Thermal stability: service temperature up to 110°C; working temperature with pre-preg even beyond 130°C (variable according to the density)
- ✓ Excellent workability with the normal working tools
- ✓ Ideal for different manufacturing processes: pre-preg, resin-transfer moulding and other infusion systems
- ✓ Excellent compatibility with every type of resin
- ✓ Good features in terms of mechanical strength

## APPLICATIONS

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TRAIN TRANSPORTATION  
MARINE TRANSPORTATION  
AERONAUTICS  
INDUSTRIAL SECTOR  
BUILDING  
THERMAL AND ACOUSTIC ISOLATION

