



## *PyroBubbles®*

PyroBubbles® is a fire extinguishing agent tested by MPA Dresden GmbH, it complies with DIN EN 3 for European fire classification A (solids), B (liquids), D (metals) and F (fats and oils). The hollow glass granulate is assigned to construction material class A1. In fire prevention it is used for infilling or as fire safety panels. The product is lightweight, main component is silicon dioxide, grain sizes range between 0.5 and 5 mm.

The foamed micro hollow spheres may be used to extinct problematic fire loads like Triethylaluminium (TEAL) and Silanes, which can hardly be controlled by conventional fire extinguishing agents. Even Thermite fires can be enclosed safely by PyroBubbles®.

### **Extinction of Triethylaluminium (TEAL)**

TEAL is a colorless liquid with highly pyrophoric properties. It is used as a catalyst in plastic production and as a reaction medium for separation of semiconductor layers in LED production. Self ignition at air takes place at normal ambient temperature. Results of fires and explosions may be dramatically for humans and environment. A safe and hermetically sealed storage is necessary. Another dangerous property is an explosively reaction due to contact with water. Therefore the application of water and foam is prohibited. Other extinguishing agents also have adversely properties.

Extinguishing studies have been carried out on a fire testing field. TEAL is stored in double-hulled containers. Material has been taken from a container to a fire tray where self ignition took place. By applying PyroBubbles® the fire was extinguished within 3 seconds.

Main extinguishing effect is smothering. The supply of oxygen to the burning process is stopped by the dense sphere packing. PyroBubbles® avoid capillary effects if applied in the adequate amount and prevent reignition.

You wish further information or references? Do not hesitate to contact us.