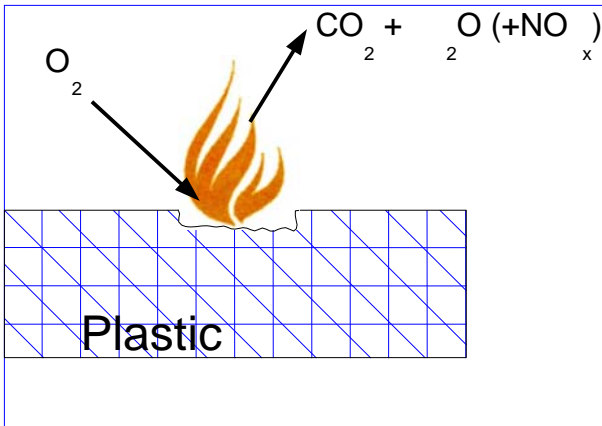
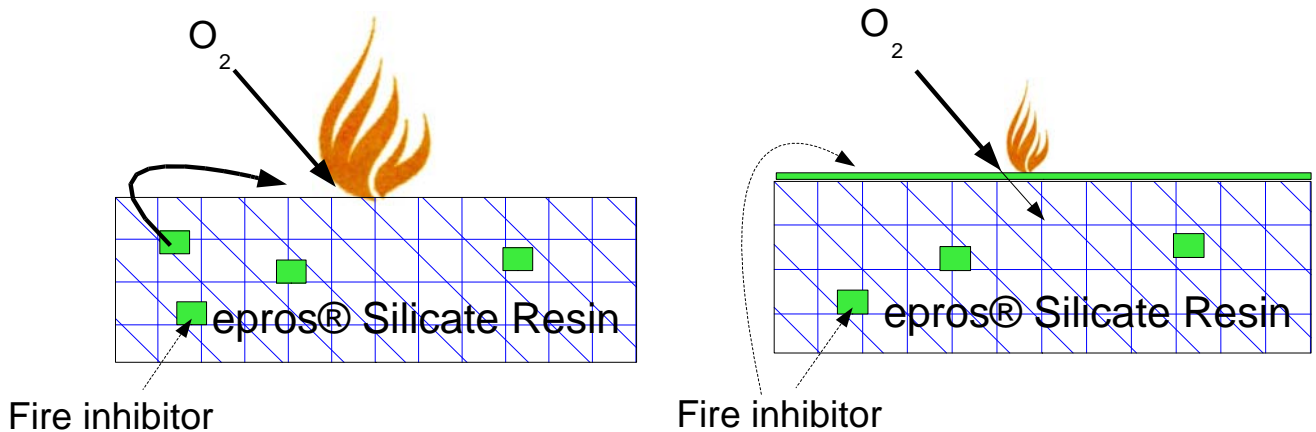


## Fire Behaviour of epros<sup>®</sup>SilicateResin

In the presence of sufficient oxygen, plastics burn to form carbon dioxide, water vapour and nitric oxides. Said combustion products are gaseous and will thus be released into the air



The epros<sup>®</sup>SilicateResin contains substances acting as fire inhibitors. With increasing heat, the fire inhibitors form a layer on the surface of the plastic material acting as an oxygen barrier. The amount of oxygen passing into the material is clearly reduced. Plastic materials will not burn in the absence of oxygen.



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## Fire Behaviour of epros®SilicateResin

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The oxygen barrier is not fully closed. Lowest amounts of oxygen remain available for the combustion of the plastic material. Then, the combustion process will no longer be “complete”, but “incomplete” and cause a carbon-like substance to form. The plastic material is thus charred on its surface. This carbonization process causes blackening. If the plastic material contains nitrogen, the char layer will turn to a brownish colour. The carbonized layer is not harmful, but enhances the oxygen barrier thereby stopping the combustion process entirely.

