Intumescent Sheet used in an Electric Vehicle Battery for Thermal Runaway Management

Abstract

An intumescent sheet to be used in an Electric Vehicle Battery for thermal runaway management, wherein out of 100 weight percentage (wt%) of the intumescent sheet, the intumescent sheet comprises: 5 to 20 wt% of non-woven fiber mat; 60 to 95 wt% of an alkali-silicate based binder; and 0.5 to 10 wt% of microporous and/or mesoporous and/or nanoporous additive, wherein the non-woven fiber mat is infused with the alkali-silicate based binder by impregnation of the non-woven fiber mat with an alkali-silicate based solution.

(No suitable figure)