



# Technical Data Sheet TD B107

March 2009

## **LSZH materials used on mineral insulated cables and accessories.**

### **Cable**

There was a growing demand in the late 1990s for cable materials that gave reduced smoke and low or zero emission of halogen compounds when involved in a fire situation. AEI Cables had been supplying cables with a low smoke zero halogen (LSZH) outer covering as an alternative to the then standard PVC for some time. In 1998 AEI Cables Ltd decided to cease supplying PVC covered cable as standard and to sheath all mineral insulated cables with an LSZH compound. PVC then became available only to special order.

This LSZH material passes all the tests for performance under fire conditions required in European standard BSEN 60702-1:2002 – ‘Mineral insulated cables and their terminations: Part 1:Cables’; ie

- IEC 60332, - flame propagation
- IEC 60745 - emission of acid and corrosive gases
- IEC 61034 - low smoke emission

The material is also approved for use by London Underground Ltd.

### **Cable gland shrouds.**

AEI Cables also supply shrouds made from an LSZH material.

### **Coated clips and saddles.**

All AEI Cables mineral insulated cable coated clips and saddles are covered with a polyester thermo-setting resin powder coating .

This material meets the requirements of

- BS 476:Part 6:1989 “Method of test for fire propagation for products”.
- BS 476:Part 7:1997 “Method of test to determine the classification of the surface spread of flame of products” and
- UL 94 “Vertical burn test”

It also meets the requirements of London Underground Engineering Standard E1042:A2: October 1996.”Fire safety performance of materials used in the Underground”