

Specifying Electec's Low-Smoke Zero-Halogen cable construction is the wisest choice.

Electec Building Wiring Systems are constructed with Low-Smoke Zero-Halogen (LSZH) compounds that provide important advantages over standard wire and cable products.

In addition to necessary electrical performance characteristics for reliability and performance, wire and cable insulated with LSZH polymers provide additional protection of life and equipment through reduced toxicity and corrosivity, excellent flame-resistance and low smoke production.

Further, Electec's armoured LSZH communications cabling delivers a unique, non-combustible steel armour construction, fully protecting polymer jacketed twisted-pair cable.

Mandated in the UK, Asia and across Europe following highly publicized cable fires and years of research, LSZH wire and cable is used in North America primarily in Industrial (Utility and Plant) environments. State-of-the-art Data Centers are also recognizing the benefits of eliminating highly corrosive halogens from large masses of exposed jacketed cable installed in close proximity to costly, mission critical equipment.

Electec is leading the way in bringing LSZH technology to mainstream construction in North America with The Next Generation in Wiring Systems®, "Plug & Play" Manufactured Wiring Systems delivering added value and cutting-edge flexibility and reusability.

What are halogens?

Halogens are a group of chemical elements including fluorine and chlorine that are highly reactive. In their inert state halogens are stable, however when heated or burned they become extremely reactive, forming highly toxic and corrosive gases.

Popular materials such as PVC (Polyvinyl chloride), FEP and PTFE (Teflon®) contain considerable amounts of halogens. It is reported that Teflon® contains 76% fluorine by weight, and PVC 30% chlorine by weight. Fluorine is the most reactive element known, and chlorine is not far behind.

The fundamental danger surrounding halogenated gases involves their contact with moisture. The addition of water to fluorine and chlorine gases form acids: Hydrofluoric Acid (HF) and Hydrochloric Acid (HCl) respectively in moist eyes, throats and lungs of building occupants or in air-handling plenums when sprinkler systems are activated. The formation of these highly toxic and corrosive acids transform a building on fire into a perilous poisonous confine capable of destroying expensive equipment and causing severe respiratory damage, visual impairment and even death.

Where to go from here?

Electec's sustainable turnkey wire and cable solutions deliver high levels of reliability, flexibility and reusability. Combining an innovative, safe and proven LSZH construction results in the safest, most environmentally responsible wiring option. For more information, visit www.electeconline.com.