



## INNOVATIVE SOLUTIONS For Eco-Conscious Fire Safety in Modern Cable Design

### MANAGE RISK

Government regulations and building standards increasingly specify the use of halogen-free flame retardant materials for wires and cables (W&C). In addition, many markets demand that low smoke and fume, non-toxic (LSFOH) solutions be chosen to help prevent loss of life and destruction of property. ECCOH™ specialty compounds from PolyOne can help manufacturers meet the demands they face for improved safety in their applications.

### SOLUTIONS FOR YOUR MARKETS

ECCOH solutions are formulated for use in applications installed where safety from flame and fumes is especially critical, such as:

- Buildings - Airports, railway stations, stadiums, office buildings, hospitals, schools, and any buildings where many people are found
- Transport - Railways, underground transport, ships, and tunnels
- Other Structures - Underground mines, oil platforms and other offshore installations, energy plants

### ACCELERATING SPEED TO MARKET

Globally available, the ECCOH range of highly flame retardant non-halogenated solutions are supported by PolyOne Innovation Centers and experts to rapidly provide customers with the formulations and application development support they need to launch successful projects.

### TARGETED PRODUCT PERFORMANCE

- Highly flame retardant - help to prevent a fire, or limit the damage if one starts
- Low smoke and toxicity - in the event of a fire, people can find escape routes and not be overcome by toxic fumes
- Low dripping - no flaming droplets which might further propagate a fire or cause injury
- Low emission of corrosive gases when burned - limits potential damage to equipment and improves human safety

### ECCOH™ SPECIALTY SOLUTIONS FOR:

W&C applications

- Used for both sheathing and insulation
- Solutions for thermoplastics and thermosets
- Technologies for thermosets
- Many grades are cross-linkable

Pipe & Fitting Compounds (ECCOH™ PF)

- Extruded & injection molded applications
- Applications include coating flexible metal conduit, smooth & corrugated conduit, mini-ducts for optical fibers

## KEY MARKETS AND END-USE APPLICATIONS

- Alarm, security and life safety
- Automotive
- Building & construction
- Data & telecommunications
- Energy & power
- Optical fiber cables
- Marine — shipboard cables
- Military & defense
- Oil, gas and petrochemical
- Railway-infrastructure
- Rolling stock cables
- Renewable energy — photovoltaic cables
- Nuclear power

## HELPING CUSTOMERS SUCCEED IN CHALLENGING MARKETS

### Optical Fiber

- High flame retardancy with low smoke, toxicity & corrosivity
- Good mechanical strength & low shrinkage for enhanced transmission of information
- Chemical and oil resistance for harsh environment
- Low friction and strip-ability for easier installation

### Building & Construction

- High flame retardancy with low smoke, toxicity & corrosivity, low heat release
- Helps to meet stringent fire regulations in building & construction applications
- Mechanical performance for various environment

### Maritime & Offshore; OPG

- High flame retardancy with low smoke, toxicity & corrosivity
- Help to meet specifications: NEK606, IEC 60092, BS6883, IEC 61892
- High performance in harsh environmental conditions including heat, cold, saltwater, “mud”, and oil
- Solutions for telecommunications, power control, and instrumentation

### Railways and Rolling Stock

- Help to meet stringent fire standards such as EN 45545
- Excellent oil resistance
- Suitable across a wide range of operating temperatures
- Solutions for rolling stock, infrastructure, fire alarm cables, as well as electrical conduits & clamps.



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