ECCOH™ 5702 Low CoF LSFOH Solutions
Simplified Installation of Optical Fiber Cable

PRODUCT DESCRIPTION
ECCOH™5702 is a highly flame retardant non-halogenated sheathing compound designed to facilitate the installation of optical fiber cable in conduit. This material was formulated to exhibit a very low coefficient of friction (CoF), which improves the sliding properties of cable manufactured from it in comparison with standard LSFOH (low smoke and fume, non-halogen) solutions.

VALUE SOLUTION
PolyOne’s ECCOH™ line of highly flame retardant non-halogenated compounds offer significant value in many types of W&C applications. The value extends from properties such as:

• Highly flame retardant — help to prevent a fire, or limit the damage if one starts
• Non-halogenated — in the case of a fire, these material do not release emissions which could damage equipment and buildings, and harm people
• Low smoke — in the event of fire, people can find escape routes and fire fighters can quickly find the source of the fire
• Low toxicity — in the event of a fire, people are not overcome by toxic fumes
• Low dripping — no flaming droplets which can further propagate the fire and cause injury to people
• Low emission of corrosive gases when burned — avoids potential damage to electrical components and equipment, and improves human safety

KEY CHARACTERISTICS
The primary features and benefits of ECCOH™5702 are:

• High flame retardancy with low smoke, toxicity & corrosivity
• Low coefficient of friction, with permanent effect
• Good surface smoothness
• Easy to process – low melt viscosity
• Suitable for thin wall applications
• Good mechanical strength & low shrinkage

PolyOne®
TARGET MARKET AND APPLICATIONS
Optical fiber cable and other cable requiring a very low CoF and benefitting from the low smoke and fume, non-halogen nature of these materials.

TECHNOLOGY
The coefficient of friction of cable manufactured with ECCOH™ 5702 specialty solutions can be up to 75% lower than that of cable made using standard LSFOH compounds.* This feature allows good sliding of an optical fiber cable into conduit, particularly in congested conduit, and so eases installation. The low CoF can be a critical need when rapid installation is required, when installing cable over long distances, or when duct design is complex.

For external applications, the ECCOH™ 5702 solution can be UV stabilized. PolyOne can support customers with specific accelerated photo-degradation testing such as use of a SEPAP chamber for the French market.

*Tests conducted by PolyOne