



**Hi-Fi**<sup>®</sup>  
**WIRES & CABLES**

**POWERING  
THE NATION**

**H.R.F.R**  
HEAT RESISTANT / FLAME RETARDANT

# Hi-Fi<sup>®</sup>

WIRES & CABLES

## WIRES & CABLES

# SAFETY IS THE PRIORITY QUALITY IS THE STANDARD

Introducing dual coated PVC wires with high grade copper to provide utmost purity and safety to your home. With our extrusion machines extruding 300meters of coil per min we ensure only high grade copper is used.

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# CONNECTING THE NATION

## Flame Retardant

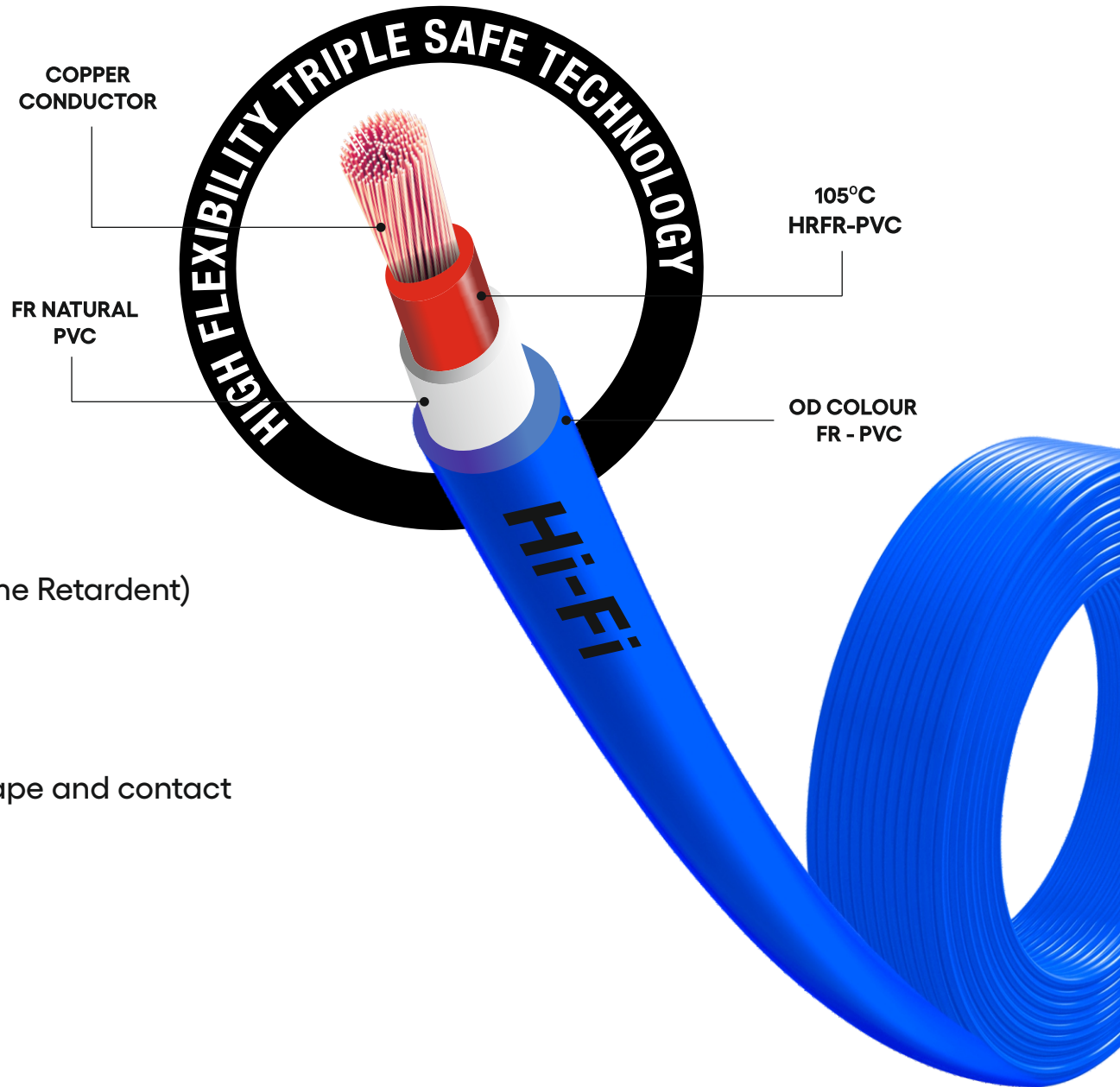
Hi-Fi Cables are made from specially formulated PVC polymers that restrict the toxic gases and smoke and therefore are safe, reliable, flame retardant and a non-toxic alternative.

## Twisted FR Series

Hi-Fi Cables are TFR (Twisted Conductor Flame Retardant) cable can withstand upto 70° C

## Features

- No Sparks due to perfection in conductor shape and contact
- No loose strands in conductor
- No loss of copper strands during stripping
- Esasy Installation



## Commonly Used Fillers

Fillers are used in wire & cable formulations to reduce the price of the compound while improving electrical or physical properties. Fillers can positively affect heat transfer and thermal conductivity. Calcium Carbonate is the most common filler for this purpose. Silicas are also sometimes used.

## Pigments in Wire and Cable

Pigments are of course added to provide distinguishing color to compounds. Titanium Dioxide is the most commonly used color carrier.

## Lubricants

Lubricants for wire and cable can be either external or internal, and are used to aid in the reduction of the PVC sticking on the hot metal surfaces of the processing equipment. Plasticizers themselves can act as an internal lubricant, as well as Calcium Stearate. Fatty alcohols, waxes, paraffin and PEGs are can be used for additional lubrication.

## Common Additives in Wire & Cable

Additives are used to impart special properties required for the end use of the product, for example, flame retardancy or resistance to weathering by the sun or by microbes. Flame retardancy is a common requirement for wire and cable formulations. Additives such as Antimony Trioxide (ATO) are effective flame retardants. Plasticizers used such as phosphoric esters (i.e. TBP, TOF) can also impart flame retardant properties. UV-absorbers may be added for exterior use applications to prevent weathering by the sun. Carbon Black is effective at protection against light, but only if you are making a black or dark colored compound. For brightly colored or transparent compounds, UV-Absorbers based on Benzotriazole or Benzophenone can be used. Biocides are added to protect PVC compounds from degradation by fungus and microorganisms. OBPA (10,10'-Oxybisphenazine) is frequently used for this purpose and can be purchased already dissolved in plasticizer.