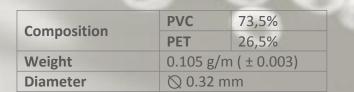
# **COFIL** Environmentally friendly and Flame Retardant PVC **Polyester Coated Yarn**

- Flame Retardant
- Odorless
- Carcinogen-free PVC compound
- The vinyl coating on the fibers gives the material added strength and durability
- Antifungal & Antibacterial
- Vinyl coated polyester is a very dimensionally stable fabric that does not tear easily, nor will it stretch, crack, rot or mildew.
- The vinyl coating (PVC) makes it waterproof with a high resistance to dirt, mildew, oil, salt, chemicals and UV.
- It can be sewn or heat sealed by way of RF(Radio Frequency) welding or hot-air welding







### **APPLICATIONS:**

- SUN SCREENAWNINGS
- GARDEN FUNITURE
- WALL COVERINGS

**OTHERS** 

FLOORING







fragrance free





M1 B1 B2 NFPA

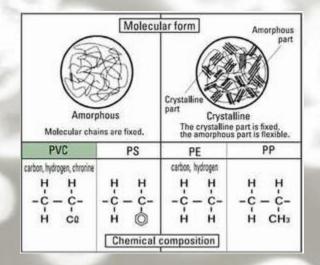


## **PVC's Physical Properties**

PVC, PE, PP and PS are general purpose plastics. The features of the particular plastic are determined by its chemical composition and type of molecular structure (molecular formation: crystalline/amorphous structure)

PVC has an amorphous structure with polar chlorine atoms in the molecular structure. Having chlorine atoms and the amorphous molecular structure are inseparably related. Although plastics seem very similar in the context of daily use, PVC has completely different features in terms of performance and functions compared with olefin plastics which have only carbon and hydrogen atoms in their molecular structures.

Chemical stability is a common feature among substances containing halogens such as chlorine and fluorine. This applies to PVC resins, which furthermore possess fire retarding properties, durability, and oil/chemical resistance.



### **Oil/Chemical resistance**

PVC is resistant to acid, alkali and almost all inorganic chemicals. Although PVC swells or dissolves in aromatic hydrocarbons, ketones, and cyclic ethers, PVC is hard to dissolve in other organic solvents. Taking advantage of this characteristic, PVC is used in exhaust gas ducts, sheets used in construction, bottles, tubes and hoses.

Material	Maximum heat release (kW/m <sup>2</sup> )
PVC	91
Fire resistant ABS	250
Fire resistant PS	315
ABS	746
PS	859
Polyester	1216
PE	1325
PP	1335
	Source: PVC and polymer Vol.29

#### Fire retarding properties

PVC has inherently superior fire retarding properties due to its chlorine content, even in the absence of fire retardants. For example, the ignition temperature of PVC is as high as 455°C, and is a material with less risk for fire incidents since it is not ignited easily .Furthermore, the heat released in burning is considerably lower with PVC, when compared with those for PE and PP. PVC therefore contributes much less to spreading fire to nearby materials even while burning.

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Therefore, PVC is very suitable for safety reasons in products close to people's daily lives.

