Ethylene propylene rubber (EPR) is a kind of saturated rubber composed of two yuan ethylene propylene rubber (EPM) and three yuan ethylene propylene rubber (EPDM). It is a kind of saturated rubber formed by copolymerization of ethylene, propylene and a small amount of diene monomers. It has excellent electrical insulation, good ozone resistance, humidity resistance, heat resistance, cold resistance, and aging resistance. It has been widely used in medium and low voltage, high voltage and even ultra high voltage cables. In terms of low voltage, it is widely used in marine cables and petrochemical industries where the environment is harsh. **EPR rubber cable|ethylene propylene rubber cable** is a widely used cable in rubber cables.

**Common structure of EPR rubber cable in chemical resistant occasions**

**Product Structure**

- **1- Conductor**: Class 5 or class 6, Round Oxygen free copper wires or tinned copper wire
- **2-Insulation**: Ethylene-propylene rubber compound (EPR)
- **3-Outer sheath**: polychloroprene (PCP) or HOFR (Heat and Oil Resistant and Flame Retardant)

**Common structure of EPR cable in marine cable occasions**

The full name of Ethylene Propylene Rubber (EPR) is cross-linked ethylene-propylene rubber. It has the stability of oxygen resistance, ozone resistance and partial discharge stability. It also has excellent cold resistance. Even at -50 °C, it still maintains good Flexibility. In addition, **EPR rubber cable|ethylene propylene rubber cable** has excellent weathering resistance and light stability. In particular, it is halogen-free and has flame-retardant properties. The ethylene-propylene rubber insulated cable with chlorosulfonated polyethylene sheath is suitable for places that require flame-retardant. Ethylene-propylene rubber insulated cables have not been widely used in my country, but they have been widely used abroad, especially in Europe.
It has excellent electrical and mechanical properties, and has good high temperature resistance even in humid environments. The long-term allowable working temperature of the core can reach 90℃, and the allowable temperature of short-circuit thermal stability is 250℃.

Global EPR has been widely used in heat-resistant and high-voltage products such as power cables, mining cables, marine cables, motor lead wires and cables for nuclear installations, and its use accounts for about 10% to 15% of the total cable industry rubber consumption.

Ethylene-propylene rubber has a large dielectric loss factor, so it is only used in power cable lines with a voltage level of less than 138kV. Because of the good water resistance of ethylene-propylene rubber, ethylene-propylene rubber cables are suitable for submarine cables, and because ethylene-propylene rubber has good soft characteristics, it is more suitable for laying and using in mines and ships.