Chapter 3
Composite Insulator Material

3.1.1 Material Types of Composite Insulator Shed

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Material
Types of Composite Insulator Shed

The material of the composite insulator shed can be divided as following four types:

- EVA (Ethylene Vinyl Acetate) - not generally used
- EP (Epoxy epoxide)
- ERP (Ethylene propylene rubber)
- SIR (Silicone rubber)

**EP (Epoxy epoxide):**

- Usually used for distribution insulators below 69KV (only for hollow bushing insulators).
- The anti-pollution ability is not good.

**ERP (Ethylene propylene rubber):**

- Used on transmission and distribution insulator up to 765KV
- The anti-pollution ability is not good.

**SIR (Silicone rubber)**

Types: RTV, LSR, HIV

- RTV and HIV are proved as the reliable material for outdoor composite insulator shed

**Advantages:**

- Good anti-pollution performance
- Good water repellency

The current used materials for composite insulator shed:

The SIR material is the most commonly used for composite insulator shed for transmission line and distribution line in China, and the world is preferred to use the SIR material.