



[sales@composite-insulator.com](mailto:sales@composite-insulator.com)  
<http://www.composite-insulator.com>

# Chapter 1

## Composite Insulator Definition

---

1.8 Disadvantage of Composite Insulator

By Orient Power

## Disadvantage of composite insulator



**Orient Power**

[sales@composite-insulator.com](mailto:sales@composite-insulator.com)  
<http://www.composite-insulator.com>

## Disadvantage of composite insulator

Composite insulators also have weaknesses, and disadvantages of composite insulator are:

- ✚ They are subjected to chemical changes on the surface due to weathering and from dry band arcing or flashover
- ✚ Suffer from erosion and tracking which may lead ultimately to failure of the insulator
- ✚ Life expectancy is difficult to evaluate
- ✚ Long reliability is unknown
- ✚ Faulty insulators are hard to find, for it is difficult to check for inconsistencies or damages
- ✚ Low strength at transverse mechanical efforts (shear forces)
- ✚ They need adequate storage conditions to avoid the rodents attacking silicone rubber, on the other hand it could be mentioned their fragility in the attack of some birds (starlings, parrots, etc.).
- ✚ Interface bonding issues
- ✚ Less experience in the field, still changing as more polymer products come out
- ✚ Regarding the use on DC overhead lines: there is still hesitation, because the lack of data / experience on their behavior over time at this specific type of stress; it could be mentioned that there no IEC standard regarding the use of composites in DC power lines.

More detailed info about disadvantage of composite insulator is shown on Orient Power website.