

## How LED gives color?

The color of photon emission depends on the chemical doped in the active material. Chemicals like Gallium, Arsenic and Phosphor are used to give color to the light emission. Some of the chemicals used in LEDs are

1. Infrared LED- Aluminium gallium arsenide
2. Red LED – Aluminium gallium arsenide, Gallium arsenide phosphide, Gallium phosphide
3. Green LED – Aluminium gallium phosphide, Gallium nitride
4. Yellow LED – Aluminium gallium phosphide, Gallium arsenide phosphide, Gallium phosphide
5. Orange LED – Aluminium gallium indium phosphide
6. Blue LED – Indium gallium nitride, Silicon carbide, Sapphire, Zinc selenide
7. White LED – Gallium nitride based indium gallium nitride
8. Ultraviolet LED – Indium gallium nitride, Aluminium gallium nitride.