



## **IS 10322 (part 5/sec 7) Luminaires** **Part 5 Particular Requirements- Section 7 Lighting Chains**

Luminaire comprising an assembly of series-connected **lamps**, parallel-connected lamps or series/parallel-connected lamps and interconnecting insulated conductors are called as lighting chains.

Lights used for **decorative** purpose viz. festival, celebratory function is an example of lighting chains.

All types of lamps, control devices are integral part of the lighting chains.

In some countries the term **strings** is used instead of chains.

IS 10322 (part 5/Sec 7) specifies **requirements** for lighting chain construction, classification, electrical and mechanical **safety** parameters.

Lighting chains shall not electrify tinsel or other metallic decorations with which they are used. Control units and similar devices forming an integral part of the lighting chain, shall be enclosed in non-flammable insulating material. In addition, they shall be securely fixed to the cable of the chain.

Lighting chains are classified as Class II or Class III according to the type of protection against electric **Shock**. Also, Insulation Resistance and Electric Strength test specifies the electrical safety requirement.

Resistance to heat, fire and tracking, resistance to dust and moisture, and construction requirements take care of mechanical safety.

Endurance and Thermal test are carried so that under conditions representing cyclic heating and cooling in service, the luminaire shall not become unsafe and the wiring within the luminaire shall not become **unsafe**.

The cable used is to be single core and may be of PVC/rubber insulation.

IS 10322 (part 5/Sec 7) mandates marking of rated voltage and Wattage on lighting chains.

Electronics and Information Technology Goods (requirement of compulsory registration) Order, 2021 issued by **MeitY mandates registration** of lighting chains with BIS.