



Halogen-Free

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Sirectifier Global Corp. (SGC) announced that the procedure of Halogen-Free had used and transformed already for the critical worldwide ordinance and regulations of environment requirements.

The main elements which put to used on the field of semiconductor are fluorine(F), chlorine(Cl), bromine(Br) and iodine (I) and their polymer. These elements play the role of the fire-retardant because of their higher ignition point at 300°C approximately. The most important reasons why the halogen made use of the multitudinous fields are the lower cost, less quantity and can be conformed to the rule of fireproof, UL-94V-0 easily. On the other hand, the risk and harm is the toxicity such as the virulence of chlorine, chloride HCl, Dioxin and Furan which produced because burning. Above toxic element can damage human respiratory system, bring the disease of cancer and bring about environment pollution.

At the moment, the strict rule and requirement of environment such as RoHS, REACH and EDEE all limited the use of halogen already. Besides, many transnational corporation such as Dell, acer, SONY and Samsung announced their Halogen-Free requirements at the same time. The simple standard of Halogen-Free indicate that the bromine(Br) must less than 900ppm, chlorine(Cl) must less than 900ppm and total limited element (Br+Cl) must less than 1,500ppm. Besides, the elements of PFOS, PBBs, PBDE, TBBPA, PCB, PCN, CP, Mirex and PVC had been limited also.

The standard and rule we followed regarding Halogen-Free including IEC 61249-2-21, IPC4101B, JPCA-ES-01-1999, EU 2005/92/ECC RoHS), REACH(76/769/EEC) and EDEE.

The element of halogen put into the epoxy molding compound only for the assembly application of semiconductor before. At present, new Halogen-Free epoxy mounding compound instead of old ones. New fire retardant substance instead of halogen and put into epoxy and there are no change and difference on the other parts such as wafer, dice, lead frame, planting and ink between Halogen-Free and old ones. Moreover, the electronic characteristics of semiconductor are the same as old ones. There is just only tiny difference of body dimensions since the adjusted and improved molding mold for the sticky Halogen-Free epoxy.

For further details, please contact SGC at the location nearest you.

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