

SnHg – Bi (Sn/In/...)Hg – (In/Ag/Au/...)Hg Steering/Dosing Amalgams

SCOPE: This information refers to dosing amalgam, steering amalgam or solid mercury preforms available in form of spheres, wires, granulates, profiles.

Applications

- » CCFL for display/automotive
- » Compact fluorescent lamps (CFLi, CFLni, covered CFLs, T2, T3, T4, ...)
- » Fluorescent tube lamps (T5, T8, ...)
- » Induction lamps
- » Electrodeless fluorescent lamps
- » UV lamps

Characteristics

Due to low melting point of mercury, some of the amalgam preforms are coated in order to insure a proper singulation ability under industrial process window.

Standard compositions

Material selection is mainly triggered by the optimum mercury vapor pressure and by the maximum mercury content. The delivery form shall accommodate the preferred singulation or dosing process available or used to

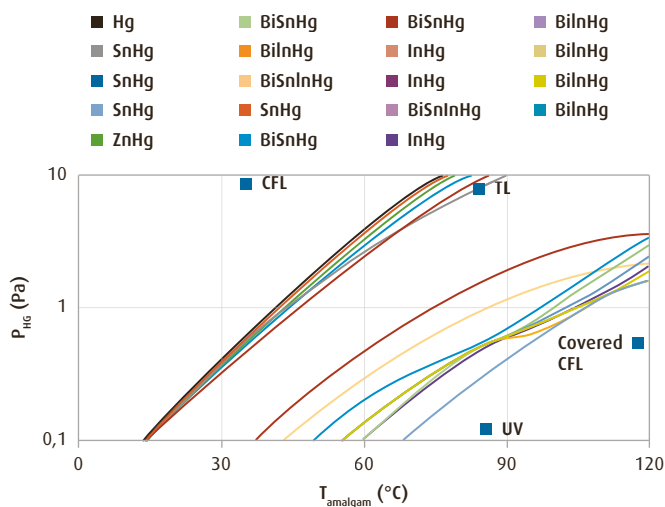
manufacture the targeted lamp. These preforms are made available in high purity.

Technical support

- » Material characterization towards failure analysis
- » Application tests towards product customization
- » Thermodynamical modeling to develop next material generation
- » production recommendation towards mercury reduction

Hg Vapour pressure

Selected examples of a few available steering or dosing amalgams used in different lamp types



Physical Properties

SnHg50 phase formation at 11 mbar (8,25 Torr)

