

$\text{SnHg} - \text{Bi}(\text{Sn}/\text{In}/\dots)\text{Hg} - (\text{In}/\text{Ag}/\text{Au}/\dots)\text{Hg}$
Steering/Dosing Amalgams



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

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

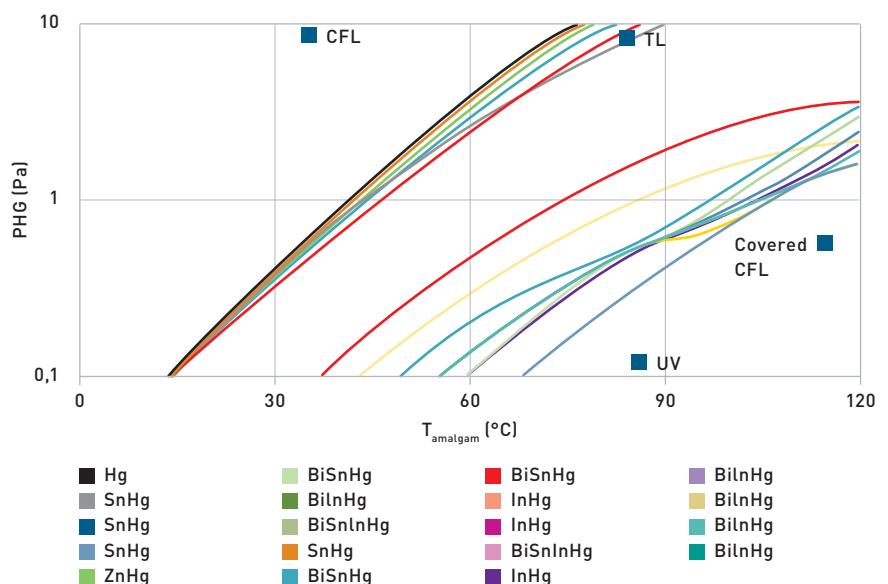
Material selection is mainly triggered by the optimum mercury vapor pressure and by the maximum mercury content. The delivery form shall accomodate the preferred singulation or dosing process available or used to manufacture the targeted lamp. These preforms are made available in high purity.

Technical support

- Material characterization towards failure analysis
- Application tests towards product customization
- 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)

