

Cavex Amalgam Capsules tested conform ISO standards

Introduction

Amalgam in capsules has a growing popularity with the dentist. In some countries in Europe it is even no longer allowed to market alloy for amalgam as powder and is the capsule a governmental requirement. Recently, Cavex introduced a new type of capsule for amalgam. This new self-activating capsule has many advantages like: easy to open without any tools, realisable and better mixing, but it is also designed to be in compliance with most recent ADA and ISO specifications.

The alloy for amalgam must be in compliance with the specifications according to the ISO1559:1995, Alloys for dental amalgam, but for amalgam capsules a new ISO standard for capsules is constructed: ISO13897, Dental amalgam capsules

In the revision of ISO1559 in 1995 a brief test was introduced for testing of amalgam in capsules: "Loss of Mercury". This was the first step to overcome leakage from amalgam capsules.

The ISO13897 contains besides requirements on packaging and dimensions of the capsules two very important specifications:

Loss of mass:

Actually this is the "Loss of Mercury test". 5 capsules are at random selected and weighed. They are amalgamated and weighed again. The loss of mass shall not exceed 5 mg.

Mercury/alloy retention:

5 capsules are at random selected and weighed. They are amalgamated, opened and emptied. The empty capsule is weighed again. The mass of the retained material found after amalgamation shall not exceed 1 % of the mass of alloy and mercury.

This ISO13897 is expected to become into force at the end of the year 2002. However, Cavex Holland has already adopted this ISO13897 and is testing Cavex NonGamma2, Cavex Avalloy and Cavex Octight capsules according to this standard.

Both ISO1559 and ISO13897 must assure that the dentist will receive reliable and safe amalgam capsules.