AMALGAM WASTE MANAGEMENT

Amalgam Collection Amalgam Storage Amalgam Recycling





Compliant with existing laws Environmentally friendly Operating globally

DENTAL AMALGAM MANAGING HAZARDOUS WASTE

Dental Amalgam

One of the most commonly used dental filling material for the past 150 years. Usually consists of about 50% mercury in combination with other metals, e.g. silver, tin or copper. More than 1,000 tons of mercury estimated in the mouths of people in the EU-27. *

Hidden Dangers

Without adequate precautions amalgam residues enter the eco-system. Bacteria and microorganisms change contained mercury into methylmercury, which is highly toxic to humans. Methylmercury is passed on in the food chain and almost completely absorbed by the human body. There it can do great harm, causing acute and chronic poisoning. It can also damage the central and peripheral nervous system, as well as harm liver, kidney and the heart muscles. Organic mercury absorbed during pregnancy affects the development of the unborn child and may lead to neurological damages.

1 gram of mercury can contaminate up to 1,000,000 liters of drinking water.



Legal actions and solutions

To avoid environmental impact of dental amalgam many legal actions have already been taken, eg "The Minamata Convention on Mercury", the "COP 3", the "EU-Regulation 2017/852 of 17 May 2017 on mercury", or the "EPA Standard 2019". The installation of ISO 11143 certified amalgam separators, the use of pre-capsuled amalgam, the proper disposal of any amalgam-contaminated waste as well as the general fade-out of mercury-containing amalgams are only some of the stipulated requirements.



Thermal treatment: Mercury Chemical treatment: Raw materials

AMALGAM COLLECTION & RECYCLING PROTECT WHAT YOU NEED

With their amalgam separation technologies, their globally organized amalgam waste collection and their in-house recycling facility, the METASYS Group offers a comprehensive solution throughout amalgam's product life cycle.

METASYS logistics & collection GmbH

The services of METASYS logistics & collection GmbH meet the specific needs of dental practices. In some countries METASYS logistics & collection GmbH handles all types of dental waste and provides an uncomplicated way for dental waste management. In cooperation with an international network of skilled collection partners, METASYS logistics & collection offers amalgam waste management in compliance with local legislation delivering several tons of amalgam waste to the company's own amalgam recycling facility every year.

Get all information on our worldwide collection centers on **www.metasys.com**

METASYS recycling & processing GmbH



All collected amalgam waste is ultimately sent to the METASYS recycling & processing GmbH headquarters in Rum, Austria. In their specialized recycling plant, the company treats the waste by thermal and chemical separation processes in order to extract the mercury and reusable ingredients. This way, approx. 2.000 kg of pure mercury can be retrieved from amalgam waste every year.



AMALGAM WASTE Filled amalgam collection containers and amalgam residues



COLLECTION From dental practice to local METASYS collection point and later to METASYS headquarters

PROCESSING

TASYS

Preparation & shredding of amalgam containers and waste

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BEST MANAGEMENT PRACTICES







Clean your amalgam separator:

Clean and disinfect your amalgam separator and suction system with GREEN& CLEAN M2 or CL N twice a day. This contributes to the perfect functioning of the amalgam separator. Proper cleaning also prevents sedimentation of amalgam particles in the biofilm of the suction tubes.

The right disinfectant:

Make sure that the disinfectant in use does not corrode the amalgam alloy and thus elute the contained mercury. Make sure that the used product does not harm the amalgam separator's materials.

Cleaning of the prefilter (filter sieve):

Empty and clean the prefilter at least once a week. Depending on your working method, more frequent emptying might be necessary. Do not clean filter sieves over the sink. All residues must be collected in the amalgam separator or appropriate collection containers (e.g. ECO CENTER).

Collect amalgam waste in appropriate containers:

Collection containers must meet set quality criteria (regulations for the transport of hazardous waste). The waste must be labelled and collected in a separate container.

New container purchase:

You can purchase various manufacturers' collection containers (METASYS, Dürr, Sirona, Cattani, etc.) through your dental dealer. You receive a complete service package consisting of a typetested shipping box and return information for your METASYS collection point (in certain countries also a return postage-paid label for dispatch by post).

Regular service of the amalgam separator by a service engineer:

Have your amalgam separator serviced by a trained engineer regularly (e.g. for METASYS MST 1 and COMPACT annual and 5-year inspections).

Disposal with a certified waste management company: Exclusively deal with certified waste management companies.

METASYS Medizintechnik GmbH METASYS logistics & collection GmbH METASYS recycling & processing GmbH

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