Name
HERMETIC solution
HERMETIC powder
For dental use only

Intended use
For the preparation of a root canal filling material or a root canal sealer based on zinc oxide-eugenol.

Composition
Solution: Eugenol and Peru balsam
Powder: Zinc oxide, zinc stearate, zinc acetate dihydrate, and zirconium(IV)-oxide

Indications
After mixing its two components (HERMETIC powder, HERMETIC solution) HERMETIC is used for filling the root canal (for example, after mortal and vital extirpation or after the treatment of gangrene), as root filling (e.g., prior to apicectomy), as chamber filling (e.g., after pulpectomy) and as root canal sealer (e.g., when using gutta-percha pins).

Contra-indications
Allergies to components of the root canal filling material.

Side-effects
When the root canal is overfilled, periapical tissue reactions, which however ease quickly, may occur.

Notice and precautions
HERMETIC powder and HERMETIC solution should be used together only and may not be mixed with other materials.
Humidity in the root canal accelerates the setting of the zinc oxide-eugenol cement. A direct contact with composites is to be avoided since eugenol softens polymer materials.
Due to the higher solubility of zinc oxide-eugenol cements, dental associations recommend the application as a root canal sealer in combination with gutta-percha pins.
The safety data sheet can be downloaded from www.legeartis.de or requested by E-Mail from sicherheits-datenblaetter@legeartis.de.

Emergency measures, symptoms, and antidotes
If after the application of HERMETIC pain should arise, either the root canal was not exactly prepared or overfilled. In the case of a not exact root-canal preparation, the cement must be removed again and the preparation must be repeated. In the case of an overfilling of the root canal a short-wave or microwave therapy resp. thermoradiotherapy has proved to be successful. The pain will ease quickly.

Avoid swallowing. After swallowing, rinse mouth.
May cause skin and eye irritation. In case of skin contact, wash with plenty of water and soap. If eye contact occurs, rinse with water for a few minutes, remove any existing contact lenses if possible. If irritation persists, seek medical advice/medical attention.

Mode of application
Mix some drops of HERMETIC solution with HERMETIC powder (mixing ratio about 1 volume part of HERMETIC solution to about 4 volume parts of HERMETIC powder) until a homogeneous cement mass is obtained in a creamy, short-breaking consistency.

After preparation and drying of the root canal, the freshly mixed cement is introduced into the root canal with qualified instruments and a qualified method (for example, with a filling spiral or Millernadel and protection of gingiva and oral mucosa by use of rubber dam) and adapted to the canal wall. Fill up to the apex but do not overfill, as undesirable tissue reactions and pain may occur. When using a root pin or gutta-percha pins, insert the pin carefully so that no root canal filling material is pressed over the apex.

For root filling before apicectomy and for filling the chamber after pulpectomy, HERMETIC can be applied by using a slightly higher proportion of powder also in a somewhat thicker consistency. This hardens the cement faster.

In case of not always avoidable overfilling into the apical tissue, reparative processes occur rapidly under connective tissue neoplasms that envelop the overfilled material before it is slowly absorbed. The pain will ease rather quickly.

Serious locally toxic reactions in the periapical tissue and an resorption of the root canal filling material within the root canal have not been observed as yet after the use of HERMETIC.

Further notices
The main target of a root canal filling is to produce a permanent sealing which prevents the penetration of microorganisms and other toxic noxae. The prerequisite is the exact preparation of the root canal as far as the apex, the quantitative removal of gangrenous pulp masses, and the perfect disinfection of the root canal.

Zinc oxide and eugenol form the matrix of the cement. Zinc acetate dihydrate and zinc stearate serve as accelerators. Peru balsam serves as binding agent and softener so that the filling cement will not become crumbly. Zirconium(IV)-oxide imparts a good radiographic contrast to HERMETIC.

HERMETIC is a root canal filling material which expands during setting and thus is parietal and absolutely tight. During setting HERMETIC absorbs humidity. After hardening HERMETIC is impermeable for humidity and not porous. HERMETIC shows no discoloration of the crown.

Do not fill back residues of the solution or the powder into the bottle.

Shelf life
HERMETIC solution and HERMETIC powder shall not be used after the expiry date.

Storage and preservation
HERMETIC powder: Always close the container immediately after removing the powder.
HERMETIC solution: No special instructions.

Administrative form and package sizes
8 ml solution Item number 0032308
14 g powder Item number 0032309

Date of revision
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