

10. Cleaning / Disinfecting / Sterilizing

10.1 Cleaning and Disinfection of Fiber Optic Light Guide

- ▶ Clean and disinfect the light guide before every use. The light guide is not sterile when delivered and must be sterilized before being used for the first time.

- ▶ Please check the manufacturer's information about the cleaning and disinfecting agents.
- ▶ Make sure that the cleaning and disinfectant agents you have chosen do not contain any of the following materials:
 - Organic, mineral, and oxidizing acids (minimum acceptable pH value 5.5)
 - Bases (maximum acceptable pH value 8.5)
 - Oxidation agents (e. g., hydrogen peroxide)
 - Halogens (chlorine, iodine, bromide)
 - Aromatic/halogenized hydrocarbons

- ▶ The light guide must not be exposed to temperatures higher than 134 °C (273 °F).

- ▶ Use a soft brush or a soft cloth to manually remove gross contaminations. Adhering polymerized composite should be removed with alcohol, a plastic spatula may help in removing the material. Do not use any sharp or pointed tools to protect the surface of the light guide from scratching.

- ▶ To disinfect, place the cleaned light guide for the specified application time into the solution, making sure that it is completely covered. Disinfectants containing ophthalmaldehyde are recommended.
- ▶ Remove the light guide from the solution and rinse thoroughly (at least 10 sec.) in water with low germ count.
- ▶ Dry the light guide with a clean cloth.

Sterilization

Effective cleaning and disinfection are absolutely essential requirements for effective sterilization. Only steam sterilization is approved as a sterilization procedure:

- ▶ Maximum sterilization temperature 134 °C (273 °F)
- ▶ Sterilization time (exposure time at sterilization temperature) at least 20 min. at 121°C (250 °F) or at least 3 min. at 132 °C (270 °F) /134 °C (273 °F)

Check

Before using the light guide again, check it for damaged surfaces, discoloration, and contamination; do not use damaged light guides. If the light guide is still contaminated, repeat the cleaning and disinfection.