The combination of Panasil® tray soft and Panasil® initial contact light – an effective alternative within the double-mix technique

A-Silicones, due to their high degree of refinement and a clearly low contraction behavior compared to condensation-curing products, are currently still considered the “gold standard” among impression materials. The hydrophilicity of many A-Silicones – achieved by adding tensides – also eliminates, to a large extent, the hydrophobic nature of silicone. This “hydrophilization” takes sufficient effect usually only some time after the mixing or even after the setting. Often, as a result, the tensides are still not active even during the injection of the impression material.

With Panasil® initial contact light, Kettenbach Company, one of a few privately owned dental companies in Germany, has succeeded in
offering a modern wash material that, due to its initial hydrophilicity, allows high-precision impressions in borderline cases, in which polyethers were otherwise mostly used as an alternative.

Panasil® initial contact light, in combination with Panasil® tray soft, is especially suitable for the double-mix technique. The use of both materials together creates a clean, uniform wetting of infragingival preparation areas. This is due to high flowability and low viscosity of the light-body material and sufficiently high dynamic pressure of the tray material. This makes the combination of both materials optimal for the impression of dental preparations with supragingival to infragingival preparation borders. In addition the low degree of final hardness of Panasil® tray soft also makes the removal of the tray easier compared to polyether impressions, and thus makes the product combination very patient-and user-friendly.

The aim of Kettenbach’s research department was to provide a light-body material that accommodates the putty-wash technique as well as the increased use of double-mix impressions. Combining light-body and carrier material resulted in more than equal effectiveness for the demands of an efficient high-precision impression of inlays, onlays, partial crowns, single crowns and bridges. A high initial hydrophilicity and excellent flowability of Panasil® initial contact light immediately after the application allow – with the optimally adjusted viscosity of Panasil® tray soft – a precise impression of sulcus areas with a certain residual moisture. A good thixotropy of light-body material also prevents the materials from running over the edges of the tray.

In terms of working time, the effectiveness of Panasil® initial contact light is clearly convincing. The product allows an easy insertion of the tray into the patient’s mouth, easy removal of retraction threads from the sulcus area, and easy application on prepared teeth. With regard to the time sitting in the mouth, the assessment by patients and dentists was equally positive. With an intraoral working time of 1 minute, the total time in the mouth was 2 minutes, 30 seconds, considered comfortably short and proving to be efficient for daily use.

As with all A-Silicones, when using Panasil® products it should be taken into account that certain types of gloves, such as latex gloves, can damage the catalyst. This applies to both direct and...
Fig. 6: Check without Dynamic Mixer

Fig. 7: Visual check

Fig. 8: Tray filling with Panasil® tray soft

Fig. 9: Application of Panasil® initial contact light

Fig. 10: Removal of retraction threads

Fig. 11: Application of preparation with Panasil® initial contact light

Fig. 12: Inserted tray

Fig. 13: Detailed view of the preparation

Fig. 14: Futar® D – bite taking

Fig. 15: Futar® D – bite registration material

Fig. 16: Removal of Provisional crown

Fig. 17: Cercon crown filled with cement

Fig. 18: Cementing of Cercon crown

Fig. 19: Cemented Cercon crown
indirect glove contact. Therefore, gloves should be tested for compatibility by applying a sample of the impression material on the glove. Incompatible gloves produce a smeared layer.

Panasil® initial contact light also offers a particularly suitable color. The contrast range for the double-mix technique proved to be highly favorable by dentists and patients. The color combination also provided particularly good readability and was also approved by dentists. The examination of the finished dental prosthesis – both on a model and on a tooth stump – confirmed optimal detail precision and dimension accuracy of the impression material.

The application of Panasil® initial contact light is carried out using a mixing gun. The pack sizes are available in user-convenient 2 x 50 ml or 12 x 50 ml cartridges. Panasil® tray soft is available in the currently common tubular bag for electric dispensing and mixing devices and is offered in three different pack sizes: 1, 2 and 6 x 300 ml Base as well as a 62 ml catalyst paste.

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**SUMMARY**

The combination of Panasil® tray soft and Panasil® initial contact light proved to have optimal effectiveness for dental patients. The positive properties of both materials bode well for this combination – especially for the impression of supragingival to infragingival preparations. Both materials are also completely suitable for the increasingly preferred double-mix technique. A good inflow of light-body materials into gaps is facilitated by mutually adjusted viscosities. For the wash impression, on the other hand, Panasil® initial contact X-light is preferable, which, due to its comparative even lower viscosity, assures a comprehensive impression of wash areas. The optimal dynamic pressure should then be preferably provided by a putty material. It should be noted that with Panasil® initial contact light, the Kettenbach Company has succeeded in providing an excellent alternative to the much-used polyethers.