primotec ®
advanced laboratory systems

Joachim Mosch
Tannenwaldallee 4
61348 Bad Homburg
Fon 06172 – 99 770 0
Fax 06172 – 99 770 99
primotec@primogroup.de

Trouble-Shooter-primosplint 02/12

problem	cause	solution
primosplint lifts off the model during the modeling process?	**primosep separator was not completely dry on the model** primosplint „swims" on the stone model and therefore lifts off easily!	**let primosep dry completely!** Apply primosplint only onto dry models!
primosplint sticks to the opposing model?	**opposing model was not sufficiently isolated** … and/or too much pressure applied by closing the articulator!	**apply a thin layer of Metatouch separator on the opposing model (brush)!** Slowly close the articulator with a tapping movement until the pin touches the inzisal plate!
fine dust is created when grinding primosplint?	**too fine carbide burs are used and/or working bench suction system is insufficient!** Just like any other light cured acrylic, primosplint is filled with ceramic fillers. By grinding these materials fine dust may be created!	**use coarse carbide burs and an efficient working bench suction system.**
primosplint is difficult to polish to a high shine?	**oxygen inhibition layer was not or not completely removed** Due to the oxygen inhibition layer created by light curing, the carbide burs loose their grinding efficiency easily, as this sticky material adheres to the grooves of the carbide. If the inhibition layer is not completely removed by grinding, those areas where it still remains are difficult to polish!	**it is much safer and easier to wipe off the oxygen inhibition layer with primoclean!** Start grinding and polishing only after primosplint is cleaned that way.
	insufficient polymerisation "insufficiently polymerised" means „soft"; soft materials are almost impossible to polish!	**primosplint needs to be always fully light cured!** If necessary change the bulbs in your light curing unit!
	no sand paper used before pre-polishing if primosplint is ground with coarse carbide burs only, the surface roughness of the material is high. This roughness is almost impossible to smoothen with pumice only. Consequently it also becomes very difficult to achieve a good high shine polish!	**always smoothen the primosplint surface with fine sand-paper, before starting the polishing procedure!** Recommendation: after pre-polishing with pumice do high shine polishing with a leather brush and gold alloy polishing paste
vertical grooves or cracks in primosplint?	**primosplint-rods compressed** this compression of the rods may occur when the primosplint container is closed "all the way down". If a rod has been compressed, it will show vertical grooves most likely in the anterior area during the modellation! After light curing these grooves may become cracks!	**do not close the primosplint container "all the way down"!**
horizontal grooves in primosplint?	**primosplint material was too cold when being modeled** Just like any other light cured materials, primosplint should be stored in a cool place. However, if primosplint is used in a too cold stage, horizontal grooves, cracks or micro-fissures may appear during the modellation!	**bring primosplint to room temperature before you start modelling it.**

primotec ®
advanced laboratory systems

problem	cause	solution
primosplint broken?	**air bubble(s) at the breakage area** cold material is stiff. When modelling this stiff material, there is a danger of micro-cracks, which could lead to air being trapped in these cracks! Air bubbles may be "built in" during modellation	**bring primosplint to room temperature before you start modelling it!** Warm up cold material in your hands before using it! Avoid to "build in" air bubbles.
	thickness below required minimum thickness in general, primosplints are not meant to replace miniplast splints but adjusted function therapy bite splints. The minimum thickness of a function therapy splint should not be less than 1,0 mm. In all cases, regular cold or hot cured acrylic has been used before, now the advantages of primosplint can be fully used. In cases where rather a miniplast splint with minimum thickness would be the choice for the particular case, primosplint should not be used.	**watch the required minimum thickness of 1,0 mm!** In critical bite situations (i.e. bruxer) use a suck-down matrix as the base! Due to the combination of primosplint and a thermoplastic suck down matrix, primosplints are strong also in very critical bite situations!
	impression and/or model distorted. In both cases the splint will fit on the model but not in the mouth. This creates a lot of internal stress in the splint which will eventually be freed by the splint breaking in the patients mouth!	**check impression and model!** produce primosplints only on undistorted models!
	insufficient polymerisation to achieve maximum stability of primosplint, it is of utmost importance that the material is fully polymerised! Insufficient polymerisation may happen if an unsuitable light curing unit was used or if the bulbs in the light curing unit are too old.	**make sure primosplint is always fully polymerised!** If necessary, change the bulbs in the light curing unit.
	primosplint was polymerised too fast Strong stroboscope light curing units with high polymerisation temperatures and strong light energy, light cure the material too fast and heat it up high. This creates internal stress in the material and may lead to breakage of the splint in the patients mouth.	avoid strong stroboscope light curing units. In case you have to use this kind of light curing units, let the material **cool down for ten minutes** after the first polymerisation before it is removed from the model!
it is difficult to add new primosplint to uncured primosplint material?	**too much Metatouch separator was used on the surface** Metatouch finger and instrument separator should be used only to the minimum. Metatouch remainders on primosplint inhibit the bonding of primosplint to primosplint!	**avoid excessive application of Metatouch on primosplint.** If too much Metatouch was applied remove it by wiping- or cutting it off.
primosplint accumulates plaque in the patients mouth?	**primosplint is rough on the underside** Not enough primosep model separator was applied initially or primosep was not fully dry prior to the modellation start. Both factors may lead to a rough surface of the splint underside, which then becomes a perfect retention area for plaque.	**put the models in water for three minutes then fully cover them with primosep and let them dry before you start applying primosplint!** If necessary, apply a very thin layer of primoglaze on the underside and polymerise it. This will seal and smoothen the underside area!
patient claims taste irritations?	**insufficient polymerisation** If primosplint, just like any other light cured material, is not fully polymerised, taste irritations may occur (may taste like "glue")	**make sure primosplint is always fully polymerised!** If necessary, change the bulbs in the light curing unit.