

Technovit® 6 Treatment Kit

Jorgensen Laboratories, Inc.

Indications:

Bovine Footrot, sole abscess, etc. Using Technovit®, a prosthesis is attached to the sound hoof. This brings the infected toe up, and the animal will walk with less pain, and the unsound toe will heal much faster.

Complete kit consists of: Technovit liquid, Technovit powder, Plastic block (for prosthesis), Cups and spatulas.

Bovine:

The plastic prosthesis should be attached to the sound hoof, before treating the opposite infected toe.

Prepare the hoof as follows:

1. Clean and shape the hoof, not only the sole area, but at least 3 cm. up the side of the hoof. Roughen the whole area with a rasp. The hoof must be clean and *dry*. A small propane torch may be used to dry the hoof.
2. The Technovit® powder and liquid are now mixed in the cup, powder and liquid in volume 2:1. This mixture, when stirred, will make a thick paste, and harden in 5 to 7 minutes. If the liquid and powder are cold, it will lengthen hardening time, especially in the winter time.
3. The paste should quickly be applied to both the roughened area, and also to the block. The block is then placed in position and the paste is molded around the block and hoof, held in position for a few minutes until the Technovit® hardens.
4. The block is designed to extend beyond the back of the hoof which will also ease the strain on the tendons. The block should remain in position for 6 to 8 weeks. By then it will have worn down or may need to be sawed off with OB wire.

Equine: Technovit® is used in hoof repair, cracks, and other orthopedic treatment.

The rapid-curing plastic Technovit® has special properties which make it an essential general-purpose aid in veterinary medicine.

In certain indication fields, Technovit® supports the therapy of the veterinarian and shortens the otherwise often long periods of treatment considerably.

Indication

Claw and hoof treatment:

Immobilization of claws during inflammatory infections

Fixation of claw tips

Covering of hoof defects (sandcracks)

Modeling of the hoof

Orthopedic hoof treatment, particularly for foals.

Treatment of bone fractures, large and small animals:

Extra-cutaneous Becker splinting in osteosyntheses

Transversal fixation by means of Kirschner drill wires for radius-ulna fractures, for tibia-fibula fractures, and for jaw fractures

Fixation of teeth

Strengthening of dressings.

Material:

Technovit® is a rapid-curing plastic on a methyl methacrylate basis which is supplied in the form of powder/liquid.

Properties:

The Technovit® dough can be cast and kneaded. The curing time is 4-5 minutes. The cured Technovit (color: grey) has a non-adhesive surface.

Technovit® is resistant to acids, alkalis and external impurities and can be dissolved in chloroform or acetone. In its liquid and doughy forms, it attacks rubber. Polyethylene and Hostaphan films are not attacked, and can therefore be used for insulating and covering the dough.

After completion of polymerization, Technovit® is hard and abrasion-resistant and can be ground, sawed, drilled, milled, etc.

Processing

Preparation

The areas which contact Technovit® (claw, hoof, block, iron) must be free of dust, dry and degreased (chloroform, light petroleum, acetone, etc. can be used for this purpose); the surface must be roughened (for example, with a hoof rasp, drawing knife or emery disc).

Mixing

Immediately before use, mix the powder and liquid in a suitable beaker to a ratio 2:1 parts by weight. The mixing ratio can be varied to obtain the desired consistency: add more powder to obtain a stiffer dough, or more liquid for a thinner mixture. The mixture is first pourable, then gradually hardens and can be applied with a spatula. As long as the mixture is kneadable, it can be molded and modeled with lightly-greased fingers.

Curing

The curing process of Technovit® begins when the powder and liquid are mixed. The process can be accelerated by heating or delayed by cooling, but not interrupted. To achieve normal curing times (approx. 4-5 minutes), it may prove practical to cool the mixing vessel and material in summer or to heat it (to about 20-22°C) in winter.

Heat is generated during curing. The resultant temperature depends on the quantity of Technovit®. To eliminate the possibility of tissue damage, the plastic can be sprayed with cold water until it has hardened.

The plastic can be cut with a hot spatula (Caution: flammable!). Openings made in this way can be simply and permanently closed with freshly mixed material.

The plastic is mechanically removed with suitable tools (pincers, hammer) when the healing process is complete.

Applications

Claw and Hoof Treatment

The immobilization of claws during inflammatory infections is effected by fitting a block to the neighboring healthy claw and using Technovit® to bond the diseased claw to it (cf. example with illustrations). These blocks, which have the same form and size as the claws, are supplied together with Technovit in the combined packages or as accessories.