

X-LITE®

Distal Interphalangeal (DIP) Mallet Splint Instruction Sheet

X-LITE® is a lightweight and airy low temperature thermoplastic material engineered to meet your splinting, bracing and casting needs. X-LITE® is a non-toxic, 100% biodegradable and environmentally friendly material made from 100% cotton fabric, impregnated with thermoplastic resin.

X-Lite becomes completely cured during the manufacturing process. This means it does not contain any residues in unreacted form, and therefore will not release such residues when applied or worn.

X-LITE® is a strong, stable and very durable material.

Thermoplastic polymers become soft and mouldable when heated and solidify while cooling down. This process can be repeated any number of times without material breakdown or waste. The cotton fabric mesh forms a natural passage way for heat and moisture which makes it perfect for Mallet splints.

Recommended Material

- X-LITE® Classic (sheets or rolls)

Objective

- Immobilisation of the DIP joint (finger or thumb)
- Positioning of the DIP joint

Indications

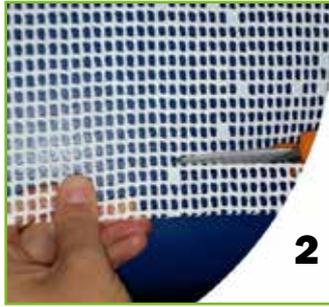
- Post Trauma i.e. tendon injury (mallet injury)/distal phalanx fracture
- Post-surgery i.e. arthrodesis/fusion of the DIP joint
- Positioning of the DIP joint
- Pain
- Oedema
- Arthritis/Rheumatological conditions
- Instability



INSTRUCTIONS



1
Measure width of splint needed by adding a row of rectangular openings to the width of the finger. Average length of splint = 15 holes.



2
TOP TIP: Cut material with holes orientated horizontally. This will make the splint easier to mould.



3
Heat X-LITE® material in water-bath set at 70°C. Place material distal to PIP joint on the volar aspect of the finger.



4
Fold X-LITE® material over the top end of the finger. Keep a gap on one side of the splint to allow for adjustments. Use the stretch of the material to help lift the end of the finger.



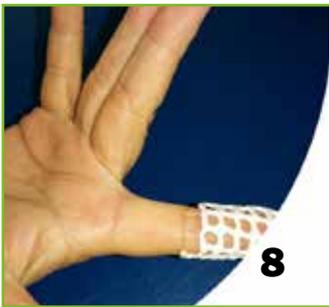
5
Fold over edges of X-LITE® material at the tip of the finger and apply pressure to seal one side. Stroke along the material to smooth edges.



6
Position the splinted finger in neutral or hyperextension using pressure along the volar side. Don't push on the fingertip as this may cause a pressure area.



7
Use your palm to position the DIP joint to neutral or hyperextension. This will distribute the pressure evenly.



8
Ensure the PIP joint is not occluded by the splint.



9
Tape into place adjusting the gap in the splint to fit. Inform the patient to change the tape when it gets wet or dirty.



10
Inform the patient to keep the splint on 24 hours a day. Your patient may get their hand/finger wet when wearing the X-LITE® mallet, as long as they have been advised to change the tape when necessary. Skin will dry through the splint.



11
Inform your patient to mobilise PIP joint fully.