SMTL Dressings Datacard

Product Name:	**SCOTCHCAST PLUS**
Classification Name:	**Bandage Orthopaedic Resin**
Manufacturer:	**3M Healthcare Ltd**

Description

Scotchcast Plus consists of a knitted fibreglass substrate impregnated with a polyurethane resin containing a surface-modifying agent. This is included to reduce tack and facilitate application. The base fabric used in Scotchcast Plus is extensible in all directions, which makes the bandage very conformable in use. When Scotchcast Plus, is exposed to moisture vapour or immersed in water, the resin undergoes a polymerisation reaction, which causes the tape to harden and become rigid. A cast made from Scotchcast Plus will set in approximately 3-5 minutes, and be weight-bearing some 20 minutes after setting. The resulting cast is lightweight, strong, porous, and translucent to X-rays.

Indications

Scotchcast Plus may be used in most situations where rigid immobilisation is required. These include the formation of standard orthopaedic casts and specialised prosthetic appliances.

Contra-Indications

In common with all polyurethane casting tapes, Scotchcast Plus, should be applied with caution on fresh fractures[*** linked fr-00 ***] where swelling of the injured limb may be anticipated, which could make rapid removal of the cast necessary.

Method of use

Scotchcast Plus, should be applied over a layer of stockinette and orthopaedic padding. Although any suitable product may be used, some workers prefer to use non-absorbent materials based upon synthetic fibres such as polyester, rather than the cotton-based materials usually used in conjunction with plaster of Paris (which will retain moisture, should the final cast become wet). Prior to application, the bandage should be immersed in water at 21-27 °C, and squeezed several times under the surface to ensure complete penetration of water into the body of the bandage. If a slightly slower setting time is required, the bandage should be immersed in water for a couple of seconds only. Alternatively the bandage may be applied dry and wetted with wet gloves to activate.

The tack-reducing agent in Scotchcast Plus is also activated by water, so firm squeezing will enhance the ease of application of the bandage. The tape should be applied in the form of a spiral, each turn overlapping the previous one by about one-third to one-half of the width of the tape. Three layers of Scotchcast Plus are usually sufficient in most non-weight-bearing situations, but four or five layers may be required at the heel and toe of a weight-bearing cast. If splints are required, these may be produced from three or four layers of tape. The cast may be moulded to its final shape during the last 30 seconds of its setting cycle, after which time it may be windowed or trimmed with shears or a standard cast saw. The casts may be repaired or reinforced by the application of additional tape.

Although this will adhere successfully to the existing cast, a complete layer should be applied, if possible, to achieve the maximum adhesive bond.

Warnings

Prior to setting, the polyurethane resin will adhere firmly to unprotected skin and clothing. Operators should always wear gloves when handling Scotchcast Plus and care should be taken to ensure that the uncured tape does not come into contact with the patient's skin. Once set, the cast is not adversely affected by moisture, but immersion of the cast in water is not recommended, as it may prove very difficult to dry the underlying padding. This in turn may lead to maceration and irritation of the skin.

If the cast is removed with a reciprocating cast saw, the use of dust extraction apparatus is advisable.

Presentation

Scotchcast Plus, is available in the form of a roll, wrapped around a hollow core, and heat-sealed in a poly/foil/poly laminate pouch.

Storage

Unopened rolls of casting tape should be stored in a cool dry atmosphere below 24 °C. Above this temperature, the shelf life will be decreased.

Sizes

1 in × 2 yd

3 in × 4 yd

4 in × 4 yd

5 in × 4 yd

Revision Details

Revision Author	Dr S. Thomas
Revision No	1.3
Revision date	1997/12/16

Please inform SMTL of any inaccuracies or changes required in this datacard.

Disclaimer

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