3M™ Scotchcast™ Casting Products
Scotchcast™ Plus and Scotchcast™ 2

Description: Scotchcast casting products consist of a knitted fiberglass fabric impregnated with polyurethane resin. Exposure of Scotchcast products to moisture or water initiates a chemical reaction which causes the tapes to become rigid. Finished casts produced from Scotchcast casting products are lightweight, strong, radiolucent, and porous.

Composition: Scotchcast synthetic casting materials are composed of knitted fiberglass fabric impregnated with a water activated polyurethane resin. In its unhardened state the resin contains a very low volatility form of diisocyanate, commonly known as MDI. Air sampling which has been conducted indicates that diisocyanate is not present in detectable amounts during application of these materials.

Cast removal with an oscillating type cast saw generates dust which is lower in quantity and larger in particle size than the dust generated upon removal of a Plaster of Paris cast. The dust consists of glass fibers embedded in cured polyurethane and a minor amount of glass fiber dust, both of which are of non-respirable size and are considered to be nuisance dusts. Air sampling indicates that the quantity of dust particles falls well below the permissible occupational exposure limits for nuisance dusts.

Indications: 3M Scotchcast Casting Products are intended for use in the construction of most common orthopedic casts, as well as specialized prosthetics and orthotic devices. Specific application suitability should be the responsibility of a qualified, on-site medical professional.

Flammability: 3M Scotchcast casting products meet Class I flammability requirements of Title 16 CFR 1610 (CS 191-53).

Precautions: The polyurethane resin in Scotchcast products will adhere firmly to unprotected skin and to clothing. Protective examination or surgical gloves MUST be worn while handling the tape. Care should be exercised to avoid contacting unprotected areas of the patient’s skin during application. One should allow the material to fully cure before touching with unprotected skin. This takes about 30 minutes.

If water immersion is anticipated, the casted extremity must be prepared with a suitable water-shedding stockinet and/or cast padding. The cast must be constructed using a minimal amount of padding and stockinet. Patients must be thoroughly instructed in techniques of drying their casts if they become wet, as prolonged or too-frequent wetting or ineffective drying can lead to skin maceration or other complications. Maximum strength is achieved when cast is thoroughly dried.

Instructions For Use: Preparation of the site, wound management, fracture reduction, postsurgical care and general patient supervision should follow established practices.

1. Slip one or two layers of 3M Stockinet over the affected part, and/or wrap with 3M™ Cast Padding. If desired, additional cast padding may be used for greater protection of pressure points and bony prominences. It is important to use 3M water-shedding stockinet and cast padding to enable thorough drying if the cast should be immersed in water.

2. Gloves MUST be worn while wrapping the casting tape since the resin in the tape will transfer and adhere to the skin.

3. Select the desired width of Scotchcast casting tape. Open only one roll at a time, since room humidity may initiate hardening.

4. Immerse the roll of tape in room temperature water 70-75°F (21-24°C). NOTE: Three firm squeezes of the roll while it is submerged will give a set time of approximately 3 minutes. To lengthen the set time, immerse the roll and remove it immediately without squeezing. This technique will give a set time of approximately 4 minutes. When using Scotchcast Plus casting tapes, there may be a decrease in slipperiness if the roll is not squeezed while submerged in water. Warmer water shortens the set time while cooler water will lengthen it. If the roll is immersed in water above 80°F (27°C) an increase in exotherm may be noted.

5. Construct the cast by wrapping spirally, overlapping the previous turn one-half to two-thirds the width of the tape. As with any cast, take care to avoid excessive tightness. To ensure a snug fit, however, wrap with slight tension on the tape rather than the rolling application common to plaster. Just three or four layers provide a strong nonweight-bearing cast and five to eight layers are typically adequate for weight-bearing cast. Additional layers are generally not necessary for strength and will reduce porosity.

A • Attention, see instructions for use.

The lot in a box and the hourglass symbols are symbols that represent lot number and expiration date. The hourglass is followed by a year and month which represent the expiration date (year and month: 2010-10). The entire line after the hourglass represents the lot number (2010-10 AZ).