



Product Safety Data Sheet **Cellacast[®] Xtra Casting tape**

1. Product:

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Product Name: Cellacast[®]Xtra Casting tape

Order Code : 25201 - 25205
25211 - 25214
25221 - 25224
25235 - 25242

Intended uses: Orthopaedic casting material. Not to be used for swollen, fresh fractures, in circumferential presentation, but suitable when used as a splint retained by a bandage.

2. Composition of the Product:

Fabric: Knitted glass fibre	60%
Polyurethane prepolymer	40%

Hazardous Ingredients of the Polyurethane prepolymer:

NCO terminated pre-polymer	(CAS-Number: 39420-98-9)
Aromatic Isocyanates (MDI`s)	(CAS-Numbers: 101-68-8 and 26447-40-5)
Morpholine Derivative	(CAS-Number: 6425-39-4)



3. Hazard Identification:

The uncured polyurethane prepolymer may cause skin, eye and respiratory irritations. Direct contact between the skin and the uncured casting material must be avoided. Limbs should be suitably protected before Cellacast[®] Xtra is applied. Gloves are mandatory for the person applying the casting tape.

Because of its low volatility this product is not likely to be an inhalation hazard. Air sampling which has been conducted in normal use indicates that the MDI concentration is well below the MEL of 0.05 mg/m³ during application.

Studies with CELLACAST[®] Xtra cast have shown that apart from large particles of polyurethane resin (up to 500 microns in diameter) a small amount of glass fibre needles with a diameter smaller than 5 microns and of the range 5 – 300 µm length is produced. The total amount of dust is much less than the MAC value of 6 mg/m³ fine dust (MAC = maximum worksite concentration during full-time work) below which work can be undertaken in safety and without any health hazard. Nevertheless, good ventilation should always be ensured, especially if working repeatedly with synthetic splinting bandages; the use of face-masks or oscillating saws with aspirating dust extractors is a sensible precaution.

4. First-aid measures:

For hazardous ingredients:

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|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute eye contact: | Flush with clean, lukewarm water for at least 15 minutes, occasionally lifting eyelids, and seek medical attention. |
| Acute skin contact: | Remove contaminated clothing. Wash affected areas thoroughly with warm soapy water. Seek medical attention if irritation persists. Wash contaminated clothing thoroughly before reuse. |
| Acute Ingestion: | Do not induce vomiting. Do not give anything by mouth. Seek medical attention. |
| Acute Inhalation: | Remove person to fresh air. If breathing is difficult, give oxygen. Apply artificial respiration if necessary. Seek medical attention. Asthmatic type symptoms may develop and may be immediate or delayed up to several hours. |



5. Fire-fighting measures:

Use the customary extinguishing media: foam, CO₂, dry extinguishing media, water fog (large quantities). Use self-contained breathing apparatus. Decomposition and combustion products may be toxic.

6. Accidental release measures:

Take up mechanically and place in suitable containers for later disposal. Prevent entry into water system.

7. Handling and storage:

Handling: When handling the unhardened bandage avoid contact with skin and clothing. Limbs should be suitably protected before Cellacast[®] Xtra is applied. Protective or surgical gloves are mandatory for the person applying the casting tape. Face-masks are recommended when removing the casts with oscillating saws which are not fitted with an extraction-unit (see section 3).

Storage: Store in a dry place (temperature not exceeding 24°C) avoid direct exposure to the sun.
Stable under recommended storage conditions.
The undamaged product has a shelf life of 3 years.
The foil bag should not be opened unless the product is to be used immediately.
Each bandage is packaged in a sealed foil pouch. Care should be taken not to puncture this pouch as this will cause the bandage to harden prematurely in the pack. High temperatures may affect the shelf life and handling properties of the bandage.

8. Exposure controls and personal protection:

See section 7.



9. Physical and chemical properties:

For hazardous ingredients:

Boiling Point:	208°C at 5 mm Hg
Vapor Pressure:	< 1x10 ⁻⁵ mm HG (25°C)
Vapor Density:	Heavier than air
Specific Gravity:	1,12
Water:	Reacts slowly with water
Incompatibility:	Alkali or alkaline earth metals, strong acids, copper, brass, elastomers

Appearance of Cellacast® Xtra:

A knitted fibreglass fabric substrate coated with an urethane prepolymer (natural and colors). Rolled on a core (bandages) or layered and folded (splints). Tacky surface before curing.

On activation of the bandage with water, the polyurethane resin forms a rigid material, releasing small quantities of carbon dioxide. At the recommended water temperatures (20 – 24 °C) a small exotherm is evident whilst the bandage is setting.

10. Stability and Reactivity:

Stability of Cellacast® Xtra:

Stable under recommended storage conditions. Excessive temperatures during storage (exceeding 50 °C) may produce fumes within the package that may be released on opening.

The undamaged product has a shelf life of 3 years.

For hazardous ingredients:

Hazardous Decomposition Products: CO₂, CO, NO_x, isocyanate vapor and mist, traces of HCN

Hazardous Polymerisation: May occur with incompatible reactants or at temperatures above 177°C

11. Toxicology Information:

Acute toxicity:

Eye irritation:	Irritant.
Skin irritation:	Irritant.
Acute Inhalation Exposure Effects:	Respiratory irritant.
Sensitization:	Causes allergic skin and respiratory sensitivity in some people.



12. Ecological information:

Biodegradation of the products is estimated to be low. Disposal of this synthetic casting tape produces CO₂, H₂O, glass and traces of nitrous gases; the incineration or landfill disposal of the packaging CO₂, H₂O and traces of Al₂O₃.

13. Disposal considerations:

Incineration/landfill in accordance with local environmental health guidelines.

14. Transport information:

Transport according to the national transport regulations.

15. Regulatory information:

The following information is supplied for the resin constituent only and may be required for EC countries applying stricter provisions of the EC Dangerous Substances or Dangerous Preparations Directives:

<u>Hazard symbol</u>	Xn:	Harmful
<u>Risk Phrases</u>	R20: R36/37/38 R42/43	Harmful by inhalation Irritating to eyes, respiratory system and skin May cause sensitisation by inhalation and skin contact
<u>Safety Phrases</u>	S23 S24/25 S26 S28 S37 S45	Do not breathe vapour/spray Avoid contact with skin and eyes In case of contact with eyes, rinse immediately with plenty of water and seek medical advice After contact with skin, wash immediately with plenty of water Wear suitable protective gloves In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)

16. Comments

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our products are advised to confirm in advance of the need that the information is current, applicable and suitable to their circumstances. Recipients must take responsibility for observing existing laws and regulations.