eXaSkin®

Frequently Asked Questions

Is it possible to use eXaSkin with electron beams?

eXaSkin has been developed to be used **exclusively with photon (6MV)**, avoid the use of electron beams and the problems derived from its use. Thus, eXaSkin allows the safe and accurate use of photon beams, without giving up efficient treatment technics like VMAT.

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eXaSkin is a high density bolus, don't you have a product similar to eXaSkin but having water density?

There is not an objective reason for using water density bolus in the photon therapy field. Bolus just need to be **calculable** and its density has to be properly taken into account by the Treatment Planning System (TPS). On top of this, it is essential that bolus is able to **avoid build-up effect** and shows a good **skin shape adaptation**. eXaSkin presents all this features and, the fact that its density (**about 1,53 gr/cc | Solid dense bone - CIRS Electron Density Phatom 062M**) is higher, allows to avoid build-up effect with lower thickness layers.

We have made an eXaSkin layer; however, the thickness of the layer is not completely homogenous. What can we do?

As far as eXaSkin is placed on the patient while the planning CT acquired, the data about its density, shape and thickness is taken by the TPS from the CT images. Thus, whether or not the thickness of an eXaSkin layer is uniform or not is not relevant. At this point is very important to point out that **eXaSkin density must not be ever overridden**, as it is usually done when silicone bolus is used.

We have prepared an eXaSkin layer and have detected the presence of small air gaps, what can we do?

Although eXaSkin is the bolus that shows the best skin adaptation, air gaps may occur, especially in those clinical cases where the patient loses weight or the lesion volume decreases along the treatment. However, eXaSkin is able to avoid the **re-build up effect** in the presence of air gaps, especially when these are smaller than 1 cm. In any case, if considered necessary, air gaps may be filled out with ultrasound gels.

How can we fix eXaSkin to the patient surface especially when the skin lesion is lateralized?

eXaSkin can be used in combination with **thermoplastic masks**, which helps to reproduce its position during the whole treatment. For those clinical situations, where the use of thermoplastic masks is not suitable, eXaSkin can be fixed to the skin by the use of tubular bands or medical tape. The use of Immobilization cushions, like Moldcare® or TOTIM®, is very advisable to accurately reproduce the position of the area of interest.

What is the proportion of catalyzer and eXaSkin we have to use? Do these proportions affect to the dosimetry properties of eXaSkin?

One kit of eXaSkin bolus contains 900 grams of eXaSkin paste (lilac paste - Component A) and 2 tubes of 20 ml of catalyzer (red paste – Component B). Thus, one tube should be used for about 450 grams of eXaSkin, being the proportion of **22,5 grs of Component A /1 ml of Component B (Recommended proportion)**.

However, it is important to bear in mind that the Component B does not used to be limiting and, if a smaller amount is used, the hardening reaction will be slower and the eXaSkin shore could be slightly reduced. However, this will not affect the eXaSkin calculability or dosimetry properties.

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eXaSkin does not get hard enough, what is happening?

There are three reasons why this could be happening:

- The mixture of eXaSkin paste (lilac paste) and catalyzer (red paste) is not properly done. It is important to point out that both components have **to be knead energetically** until the mixture color is homogenous, without any stripes.

- The amount of Component B used is far from the **recommended proportion**, thus a bigger amount of this component has to be used.

- The product **expiration date** has been exceeded, so please check the expiration date printed on the packaging.

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eXaSkin gets hard and we don’t have time to mold it properly.

This normally happens due to the **maximum mixing time** (40 sec.) is exceed. It is very important to respect the times set in the instructions of use and it is advisable to use a timer to not exceed the **Mixing time** (**A**) (about 30 sec. – See instructions of use), at least the first times eXaSkin is managed.

How many patients can we treat with one eXaSkin kit and how can we get homogenous eXaSkin layers?

This very much depends on the size of the tumor to be treated. For instance, the treatment of a chest wall would require about a quarter of eXaSkin, a double chest wall would require a half and a small lesion would just need less than a quarter.

eXaSkin is offered with a kit of two molds (**iMold S and iMold L**), that allows to get 3 sizes of homogenous layers of the product. Thus, from one eXaSkin the following layers can be make:

1. **2 eXaSkin layers** of about 17x11x1 cm (iMold S + ½ Component A (450 g) + 1 tube of Component B) or
2. **4 eXaSkin layers** of about 17x11x0.5 cm (iMold L + the internal frame, + ¼ Component A (225 g) + ½ tube Component B).
3. **2 eXaSkin layers** of about 17x22x0.5cm (iMold L, without the internal frame, + ½ Component A (450 g) + 1 tube of Component B).

Please, check the instructions of use to find out how to use the iMold Kit.

Is eXaSkin reusable?

An eXaSkin layer can be used during the whole treatment of a single patient.

Is eXaSkin biocompatible?

Yes, eXaSkin is a biocompatible product. Several tests according to ISO 10993 have being carried out and no toxicities have been reported.

Can I use eXaSkin on magnetic resonance? Is it conductive? Does it get warm?

eXaSkin does not contain any water or conductive elements. It can be used in MR, is not conductive and it does not get warm.