

Hydrogel first aid dressing
for burns and other skin injuries

BurnTec[®]
FIRST AID FOR BURNS



Kikgel

Composition

BurnTec hydrogel dressings are an aqueous composition of natural and synthetic polymers cross-linked by a beam of electrons. Thanks to radiation processing, the product features sufficient mechanical strength and is fully sterile. In the form designated for end users, it is a 3.5 mm thick hydrogel sheet, containing polymers and over 90% water, constituting a three-dimensional network.

To ensure appropriate mechanical resistance, the entire surface of **BurnTec** has been strengthened with a medical-quality non-woven fabric with margins which make it easy to remove it from the packet and enables quick and easy application.

- ☞ A durable hydrogel pad guarantees even covering over the whole affected area
- ☞ It cools the injured area and ensures a soothing effect for up to 24 hours
- ☞ It is absorbent, wound secretion and bacteria are kept within the gel
- ☞ It is permeable to water vapor and oxygen but impermeable to bacteria – it helps protect wounds from external contamination
- ☞ Hydrogel ensures an optimally moist environment - it accelerates the formation of epidermis
- ☞ Immediate application of the dressing reduces the risk of scars
- ☞ It is soft and flexible - it adheres well to the wound and adapts to the shape of the body
- ☞ It does not stick to the wound, so the dressing can be changed painlessly
- ☞ It is biocompatible and does not cause allergic reactions



Three-dimensional network of hydrogel after drying. The polymer network swells as it takes up water.

Properties

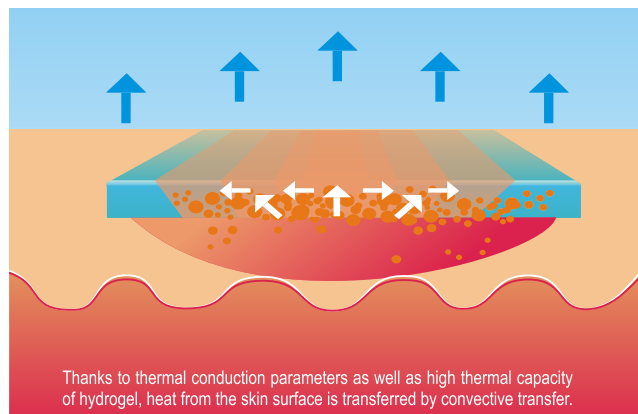
BurnTec is a modern hydrogel dressing used in the following situations:

- 🌀 first-, second- and third-degree burns (thermal, chemical, electric)
- 🌀 sunburns
- 🌀 abrasions and skin irritations
- 🌀 bruises and swelling (insect bites)
- 🌀 other skin injuries

Hydrogel dressings are flexible and elastic what facilitates application. They adhere well to the body and, thanks to the addition of non-woven fabric, they are durable, tear-resistant and convenient to apply. The hydrogel structure of the dressing makes it possible to maintain an optimal moist environment. For superficial burns (e.g. sunburn), the dressing moisturises the affected area very efficiently, while for exuding wounds, wound secretion is absorbed and contained within the hydrogel structure. Additionally, the dressings let air through and constitute a barrier to bacteria, protecting the wound against external contamination.

Regarding the use of **BurnTec**, it has been established that:

- 🌀 the dressing removes heat very effectively and cools the affected area, offering relief from pain, considerably improving the patient's comfort
- 🌀 when the dressing is replaced, wound exudate is removed from the wound together with the dressing
- 🌀 the dressing prevents drying of the wound as well as scab formation on its surface and at the same time protects it from damage and potential external contamination
- 🌀 immediate application of the dressing reduces the risk of hypertrophic scars
- 🌀 replacement of the dressing is painless - the delicate hydrogel sheet does not destroy granulation or new epithelium



Thanks to thermal conduction parameters as well as high thermal capacity of hydrogel, heat from the skin surface is transferred by convective transfer.

Application

BurnTec hydrogel dressing should be applied as soon as possible on the affected area. Sufficient cooling, as ensured by the dressing, prevents further thermal destruction of tissues and blister formation.

As **BurnTec** consists of a hydrogel mass, it has excellent penetration and thermal conduction parameters as well as high thermal capacity. Thanks to these properties, heat from the skin surface is transferred to the dressing and, through the phenomenon of convective heat transfer, is distributed evenly over the entire area of the dressing and transferred outside.

The hydrogel dressing not only ensures appropriate thermal balance but also moisture balance on the wound surface, which, in turn, accelerates epithelialization and tissue healing processes.

How to use the dressing

1. tear open the external protective and internal plastic bag (1)
2. hold the margin of the non-woven fabric and take the dressing out of the packet - the thin plastic sheet covering the dressing makes it easy to take out and accordingly should not be removed immediately (2)
3. place the dressing on the wound and remove the plastic foil sheet (3)
4. additionally, fasten the dressing with a bandage, adhesive tape or elastic mesh (4)
5. keep the dressing on the wound for up to 24 hours



Emergency treatment

BurnTec[®]
FIRST AID FOR BURNS

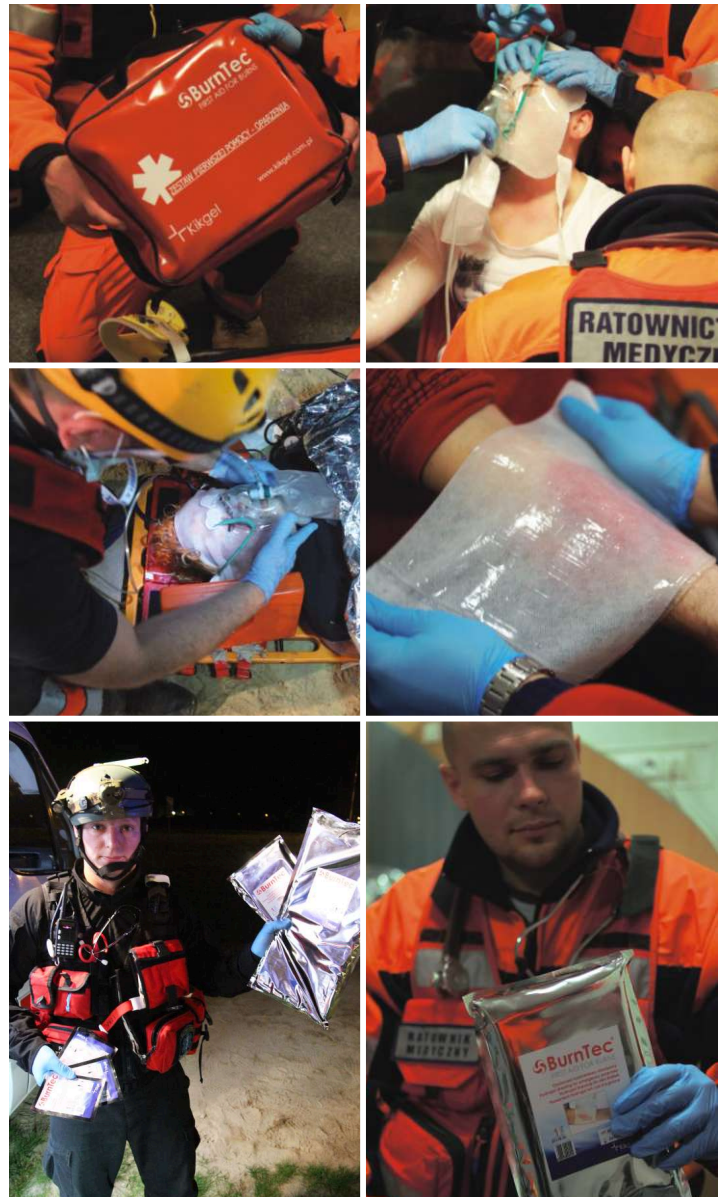
BurnTec hydrogel dressing is different from other first aid dressings. Owing to its stable-sheeting hydrogel structure, the **BurnTec** dressing guarantees even coverage and distribution of cooling activity over the entire burn surface, even for the most extensive injuries.

In addition, the stable structure of the dressing also eliminates the risk of spilling or damaging the cooling hydrogel.

While using **BurnTec** hydrogel facial mask dressing, we can be 100% sure that the hydrogel does not get into the respiratory system, even if oxygen therapy is used.

Even large hydrogel pads adhere well to the wound and can be applied quickly and easily.

BurnTec is widely used by medical rescue services, fire brigades and the army. They can also be used in medical care during sporting competitions. The dressing is often included in workplace first aid kits and it is appreciated by persons responsible for occupational health and safety.



 Kikgel

Manufacturer



KIKGEL Company has been manufacturing hydrogel dressings for almost 25 years based on the technological expertise of its team and quality management system according to ISO standards. Our products are CE-marked and FDA-approved. The innovative method of production of hydrogel dressings has been rewarded at many international exhibitions.



42nd World Exhibition of Inventions and Innovations BRUSSELS EUREKA '93 – gold medal
Special award of the EUREKA jury and of the Minister of the European Union



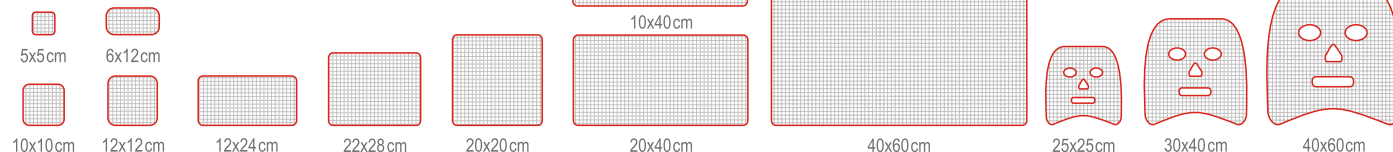
International Exhibition of Inventions IENA '95 - Nürnberg – silver medal



International Exhibition GENIUS '96 Budapest – bronze medal



The dressings are available in the following sizes:



97-225 Ujazd, Poland, tel.: +48 44 7192340

e-mail: kik@kikgel.com.pl, www.kikgel.com.pl