

Serums and Vaccines    Blood Products    Immunopreparations  
Transplants    Organs

-30°C    +4°C    +22°C

## The intelligent delta T fluid elements for your transport boxes



### The better alternative to ice



more product security



more temperature security



more room in the box



more time for transport

## Intelligent delta T fluid elements for trouble-free use of your transport box

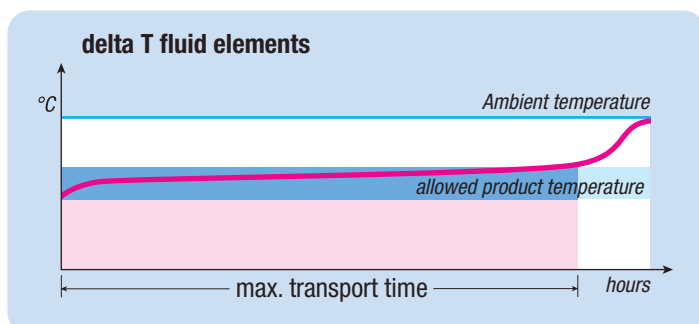
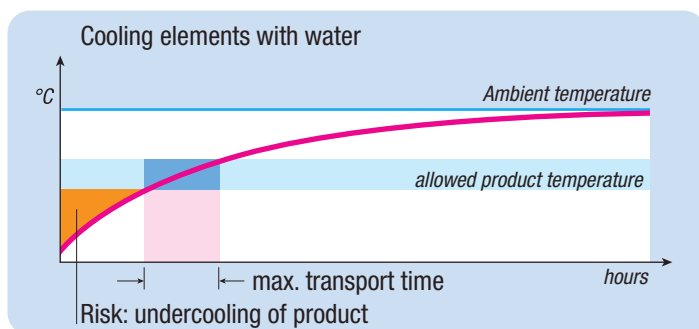
delta T fluid elements are an up to date system of passive cooling for any transportation need with thermolabile products. Suitable for all transport and insulating boxes, delta T fluid elements represent the state of current technology. Whilst formerly only water-filled and deep frozen accumulators were known, delta T now uses special fluids made of phase change material.

Background: The fluid filling changes in its respective temperature range from a solid into a liquid state. Hereby, large quantities of heat are absorbed or released. This causes a very slow temperature rise at phase change temperature. Due to delta T fluid elements, your transport boxes will have considerably improved characteristics.

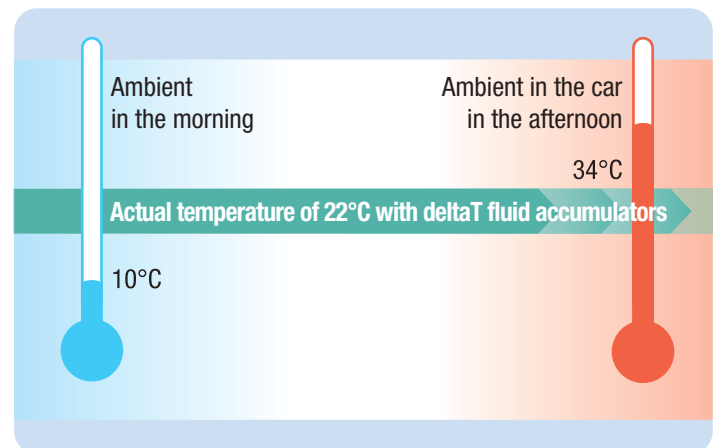
### With 4°C fluid: no freezing of the products




During the transport, delta T fluid elements never have a colder temperature than allowed for the goods to be transported. Therefore, physical contact with the product is completely risk-free, undercooling is avoided. Insulation (polystyrene container) between the product and cooling elements becomes unnecessary. It is specific to this system that sensitive products are no longer endangered by the proximity of harmful temperatures.




**With 22°C fluid: bivalent function  
Strongly varying temperatures are  
balanced.**




 delta T fluid elements maintain the inner temperature of the transport box within the allowed range. Hereby, the conditions of the ambient temperature around the boxes can even change: The 22°C fluid element warms in the cool morning, in the hot afternoon it cools the goods to be transported. Background: When the delta T fluid changes in its melting range from solid into liquid, it is specific to this system that it absorbs large quantities of heat or releases them, respectively, in the converse phase change.


**With delta T fluid elements, protection from ice is unnecessary.**

**The protection container is omitted**

 Insulation (polystyrene container) between product and cooling elements can be omitted, as contact between fluid element and product is harmless. The additional room can be used, for instance, for a higher amount of fluid elements. This increases the time available for the transport of the system. The additional room can be used also for additional products.

 The additional room can be used also for additional products.

**Your system becomes safer**

 With delta T fluid elements, your transport system is more easily manageable: There are no complex packing schemes to deal with. There are no deep-frozen accumulators in the transport box which could damage the product.





## delta T fluid elements State of the art for any use

delta T offers up to date fluid elements for any transportation need with temperature-sensitive products: They maintain the temperature very effectively, and they do not endanger sensitive products with harmful temperatures. Hereby, complex instructions for the filling of the transport boxes are omitted. Longer transport times become possible and strong temperature variations during the transport can be balanced out.



	Size					
	200 ml 165 x 88 x 21 mm	500 ml 320 x 245 x 11 mm	600 ml 190 x 121 x 34 mm	1 L 210 x 160 x 40 mm	2 L 319 x 275 x 35 mm	3 L 465 x 275 x 35 mm
Temperature range	Order number					
37°C	A 1000 37	A 0800 40	A 0900 13	A 1000 39	A 0900 07	A 1000 40
22°C	A 1000 31	A 0800 34	A 0900 12	A 1000 33	A 0900 06	A 1000 34
4°C	A 1000 25	A 0800 28	A 0900 11	A 1000 27	A 0900 05	A 1000 28
-18°C	A 1000 13	A 0800 16	A 0900 10	A 1000 15	A 0900 03	A 1000 16
-21°C	A 1000 07	A 0800 10	A 0900 09	A 1000 09	A 0900 02	A 1000 10
-30°C	A 1000 01	A 0800 04	A 0900 08	A 1000 03	A 0900 01	A 1000 04

## The assortment

delta T fluid elements are available for six temperature ranges. All elements are non-toxic and suitable for the transport of pharmaceuticals and foodstuffs. Fluid elements are available in a suitable size for your transport boxes as well.

delta T offers you the selection and validation of suitable elements for your purposes.

