

Preconditioning SOP – Thermal Coat US

For +2 to +8°C and +15°C to +25°C shipments




The ability to stabilize the temperature inside va-Q-tec’s Thermal Coat US for a qualified duration is caused by va-Q-tec’s unique temperature batteries. Depending on customer requirements, temperature batteries are available with different Phase Change Materials (PCM) in individual colors. For a temperature-controlled shipment, a proper preconditioning process of the temperature batteries is mandatory. This instruction document describes each step of the preconditioning process for va-Q-gel used in va-Q-tec’s Thermal Coat US. The following preconditioning instruction is valid for the temperature batteries: va-Q-gel +05G and va-Q-gel +22G in combination with the Thermal Coat US for +2°C to +8°C and +15°C to +25°C.

Step 1

Before use, check the temperature batteries for damages such as cuts. Do not use damaged temperature batteries!

Step 2

Store the Thermal Coat incl. its temperature batteries at a temperature as defined in the table below:

PCM	Color Code	Method	Duration	Average Preconditioning Temperature	Tolerance
+05G EL		Const.	≥ 72 hrs	+3°C	± 0.5
+05G EL		① Freeze	≥ 24 hrs	-20°C	± 5
		② Thaw	1 hr	+5°C	± 3
+22G EL		Const.	≥ 72 hrs	+15°C	± 0.5

Note:

It is necessary to secure proper airflow around the temperature batteries during the preconditioning process. A space of at least 1.5cm (0.6”) between each PCM layer of the Thermal Coat US is mandatory. Horizontal storage for preconditioning is necessary.

Step 3

Use Thermal Coat US as per respective Handling SOP.