	Technical Information	730-033-EN		V08
	Storage conditions for GKE products before and after use	Created	20.06.2016	KH
		Changed	02.09.2021	KP
		Checked	02.09.2021	UK
		Released	02.09.2021	UK
File no.: 0.0				

1. Storage conditions before use

1.1. Chemical indicators for cleaning and sterilization monitoring

All GKE chemical indicator to monitor cleaning and sterilization processes shall always be stored according to the table below. The influence of chemical fumes should be avoided. Under those storage conditions the characteristics of chemical indicators remain unchanged until the expiry date is reached.

1.2. Biological indicators

GKE biological indicators have as specified in the table below.

Product	Temperature	Relative Humidity
Chemical indicators	5-30 °C	5-80 % RH
Self-contained biological indicators (SCBI)		
Spore strips		
Spore discs		
Growth medium	2-8 °C	-
Stearo-Ampoules		
Suspensions		

1.3. Accessories

For accessories (e.g. Process Challenge Devices (PCD), Holder, Hollow-Flow-PCD Incubator etc.) which do not contain any indicators, no storage conditions apply.

1.4. Kits


For kits containing e.g. chemical indicator strips and a PCD, the storage conditions for chemical indicators apply.

2. Storage conditions after use for documentation

2.1 Chemical indicators for cleaning and sterilization monitoring

GKE chemical indicators to monitor cleaning and sterilization processes show a colour change to the pass colour by exposure to the necessary sterilization parameters (e.g. steam sterilization processes: presence of water in combination with temperature-time-window of e.g. 121 °C, 15 min). The sterilized indicators can be used for documentation and are self-adhesive. During storage the same storage conditions apply as for chemical indicators before use (see. 1.1.)

The colour change of GKE chemical indicators is based on a non-reversible chemical reaction with no change back or decolourization. For a period of 10 years a guarantee can be given but not for 30 years since those indicators are not on the market for such a long time and practical experience is unknown.

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The only known reason for discolouration is the influence of other chemicals during storage. For example, hydrogen peroxide can change the final colour on some indicators. If steam sterilized packages may be stored near VHPO sterilized packs, absorbed H₂O₂ desorbing in the packages is sufficient to allow steam-sterilized indicators to change back.

The cleaning process monitoring indicators show different wash-off characteristics depending on the process, detergent and temperature used. After storage, no color changes are known. Fully washed off indicators no longer contain an indicator. This eliminates this question. The indicators are self-adhesive and should be stored under the same conditions, see 1.1.

2.2 Biological indicators

GKE biological indicators are incubated after sterilization and the result is documented. BIs are not stored and may be disposed with normal garbage.