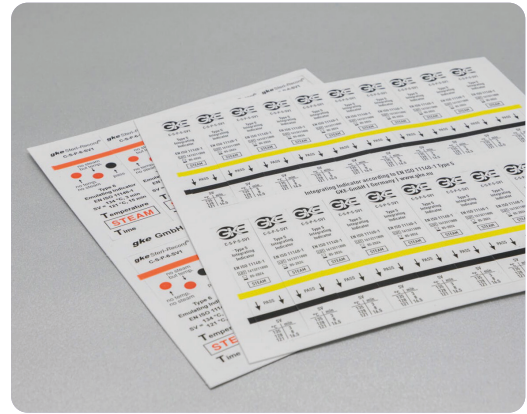




Type 5 +6 Integrating and Emulating indicators

ACCORDING TO EN ISO 11140-1



Application

The package monitoring indicators contain an integrating or emulating indicator that allows reliable information about the quality of the sterilization at the location where it was placed. Temperature and pres-sure versus time are easily monitored by the sterilizer. However, air or non condensable gases (NCG) in the sterilization chamber cannot easily be detected by those physical test methods. The presence of NCG negatively influences the result of the sterilization process. This may occur by insufficient air removal, leakages in the door seals or valves or in most cases NCG enter via the external sterilization gas supply into the sterilization chamber. Especially the combination of NCG, low temperature and dense packs may result in faulty sterilization processes.

If the integrating or emulating indicator is placed into the package/container, where the sterilization agent penetration is most difficult, the security is given that sterile conditions were reached when the indicator changed its color according to the description on the indicator. If the color is not changing according to the description on the indicator, this is an indication of presence of NCG in the pack resulting in too low concentration of the sterilant and/or an insufficient temperature-time window in the pack.

Packaging monitoring indicators should only be used if solid and porous goods are sterilized. They are not recommended if hollow devices are sterilized. In this case they may give false-positive information and Batch Monitoring Systems (BMS) based on an adequate hollow test Process Challenge Device (PCD) have to be used.

Unfortunately, the result of the sterilization process can only be determined after opening the pack. Therefore, it is important to get the information on a successful sterilization process shortly after the process without opening the packs or containers. The batch monitoring PCD simulates the worst case penetration conditions in a pack. The integrating indicator placed inside the PCD can be taken out immediately after the sterilization process. The operator has the information about the efficiency of the sterilization process. Faulty batches are immediately detected and do not get into the operation room.

Product Description

The indicator provides a reliable indication of the quality of the sterilization process, but only where it was placed.

After opening a sterile package and checking the correct color change the self-adhesive indicator is removed from the package and glued into the OR protocol.

Performance Characteristics

Package monitoring indicators respond to all critical parameters in a sterilization process. All indicators fulfil the requirements of type 5 or 6 indicators according to the European standard EN ISO 11140-1. Indicators only change its color to the end point if the sterilization parameters have been achieved. In dry heat sterilization processes all indicators are tested at 140°C, 30 min and do not change its color to the final end point.



Benefits

- Monitoring of all critical parameters of the sterilization process at the position the indicators are located.
- Environmentally friendly, no unnecessary waste.
- Patient-related documentation using self-adhesive properties.
- All chemical indicator strips are protected from bleeding by a polymer binder and surface coating and can be disposed off with normal garbage.
- Professional product design and manufacturing process provides cost-effective indicators.
- Easy interpretation of the results due to precise color change.
- The indicator color chemistry is a non-reversible chemical reaction. The indicators can be documented color-proof for several years without changing back.

Order Information

Art. No.	Quantity	Product Code	Dimension	Stated Value	Description/Application
211-221	100	C-S-P-5-SV1	14 x 65 mm	135 °C, 3 min 128 °C, 8 min 121 °C, 16.5 min	Indicators on cards, self-adhesive, without labelling option
211-224	400				
211-226	3,200				
211-230	1,000	C-S-P-5-78x48-SA-SV1	78 x 48 mm		Indicators on roll, self-adhesive, with predefined data labels
211-241	2,000	C-S-P-6-SV1	23 x 66 mm	134 °C, 3 min 121 °C, 15 min	Indicator on cards, self-adhesive, without labelling option
211-242	500				
211-243	250				
211-238	2,000	C-S-P-6-SV2		134 °C, 18 min	
211-240	250				

