

## ProChek® ID and ProChek® S Sterilization Monitors



### We use a steam autoclave sterilizer in our office. How do we know it is working correctly?

For sterilization quality assurance, CDC Guidelines advise the use of three components:

1. Physical monitors such as temperature, pressure and length of cycle using gauges on sterilizer. New sterilizers feature print-outs for each cycle.
2. Chemical ink monitors (external and internal) for every package and every load.
3. Biological monitors (spore tests) weekly.

### How do ProChek products fit into a quality assurance program?

ProChek ID Indicator Strips (SM4340) are internal Class 1 indicators reacting to steam moisture and heat. The ink changes from white to dark brown/black in steam or medium brown in chemical vapor. This product meets the CDC and AAMI ST79 guidelines for an internal chemical indicator to be used inside pouches, cassettes and packs to verify penetration of heat and steam inside the package.

ProChek S Steam Sterilization Integrators (TSI440) are Class 4 multi-parameter internal chemical monitors. The term “integrator” means the special chemical ink changes completely from yellow to blue/purple as it reacts to steam and heat over a time period that is near the parameters required to kill spores. This level of internal chemical monitor provides a higher level of assurance for surgery packs and instrument cassettes.

### Can ProChek S be used for all types of table top sterilizers?

It is specifically engineered for use with standard steam sterilizers (gravity and pre-vac). It is not suitable for monitoring chemical vapor “Chemiclaves”, dry heat or STATIM® pulse sterilizers.

### Do chemical monitors such as ProChek S take the place of biological spore tests?

No. Your sterilization monitoring program must include biological spore tests, preferably at least once a week in each operational sterilizer in use.

### We use sterilization pouches with “built-in” internal indicators. Do we still need separate internal monitoring strips?

Most self-seal sterilization pouch brands, including MicroCare ProView® plus pouches, now feature built-in external and “internal” indicators. Technically this may be adequate for small pouches with a few instruments. But the “built-in” indicator cannot monitor adequate steam penetration inside instrument cassettes or thick surgery packs that are processed inside self-seal pouches. Therefore it is recommended that a separate internal monitoring strip be placed inside the cassette or pack prior to packaging and sterilization. ProChek ID strips (SM4340) may be used but ProChek S multi-parameter Class 4 integrators (TSI440) provide a higher level of assurance for this application.

### Can I use the ProChek ID Indicator Tape in my dry heat sterilizer or Chemiclave®?

No, the tape is specific to the steam process. It will become brittle and char in the dry heat process. The indicator requires both steam and heat to change color and will not properly change (darken) in the low moisture environment of the Chemiclave®.

### What is the protocol to follow when chemical indicators do not change color or in the case of ProChek S, do not turn completely blue/purple?

Do not release the load of instruments for use. Check the physical controls (temperature, cycle time, etc.) and print out if available. Verify that correct cycle time, temperature and pressure are in use.

Determine if the sterilizer is overloaded. Evaluate how items are loaded. Packages placed paper to paper or stacked flat instead of on edge may not allow adequate circulation and penetration of steam.

Check the condition of the sterilizer door gasket. Ensure adequate level of distilled water or chemical vapor solution. Review error codes displayed on models with this feature. Repackage and reprocess all items with fresh chemical indicators. Re-evaluate after processing.

If all chemical monitors continue to fail, contact equipment repair person. Check records for date of last successful biological spore test and date of most recent passing chemical indicators. Meanwhile, keep sterilizer out of service. Recall loads of sterilized items where process monitor results are not known or not passing.

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