ARTIFICIAL TEST SOIL
REAL | SIMPLE | VERSATILE | STABLE | COMPLETE

MEDICAL DEVICE MANUFACTURERS

THIRD PARTY REPROCESSORS

TESTING LABS & RESEARCH FACILITIES

STERILE REPROCESSING EQUIPMENT MANUFACTURERS

COMPARITIVE TESTING OF DETERGENTS FOR CLEANING
**WHAT IS ATS?**

Artificial Test Soil is a test soil comprised of proteins, carbohydrates and hemoglobin. It simulates the “worst case” soiling of medical devices that have been used on patients. ATS is used for both testing and validating cleaning procedures of medical devices and cleaning equipment.

Healthmark ATS is based on extensive scientific research to comply with regulatory requirements.

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**REAL**

Healthmark’s Artificial Test Soil is comprised of the organic contaminants remaining on surgical instruments after clinical use, including protein (~23mg/ml), hemoglobin (~8mg/ml) and carbohydrates (~6mg/ml). These quantities are reflective of the “worst case” levels found to remain on instruments after patient use, but before reprocessing. The FDA and other international regulatory agencies specify that simulated-use testing should approximate as closely as possible the actual soiling the instrument is exposed to during clinical use. ATS meets this requirement with extensive research (available upon request) to support it.

**SIMPLE**

Our standardized soil is ready-to-mix. You simply add sterile water.

Medical device manufacturers must employ an organic challenge. ATS is easy to use to determine and document the effectiveness of your cleaning protocol to remove organic materials from instruments or equipment.

**VERSATILE**

Healthmark ATS can be applied to several applications, such as:

- Testing the cleaning instructions of medical devices
- Ensuring reprocessing adequacy and assurance
- Testing microbial load (bioburden) reduction
- Training personnel

ATS can be inoculated with endotoxin, microorganisms, or other biologics to represent the residuals present on devices after patient use.

**STABLE**

Unlike the current organic challenge manufacturers use, ATS offers less variability between batches. ATS is described in various AAMI and ISO standards and FDA Guidance Documents and is well documented in peer-reviewed literature.

Our ATS provides long shelf life and is easily stored at room temperature until rehydrated for use.
To provide a complete testing solution, ATS can be used with other Healthmark Proformance™ products to validate the removal of organic soils based on the manufacturer’s cleaning protocol. Further, Proformance™ products provide a solution for manufacturers to provide their users with a recommended method to verify the cleaning process, as indicated by AAMI standards:

**HEMOCHECK™**
The HemoCheck blood swab test kit is an all-in-one test, providing easy to interpret results of blood residue to 0.1ug in just 30 seconds.

**PROCHECK-II™**
The ProCheck-II protein swab test kit is an all-in-one test, providing rapid results to measure residual protein on surfaces to 1.0ug.

**CHANNELCHECK™**
The ChannelCheck tests for blood, protein and carbohydrates simultaneously in virtually any lumened instrument, almost instantly.

**TOSI®**
The TOSI Instrument Washer Test is a surrogate device for stainless steel instruments that correlates directly to instruments soiled with blood during clinical use. It can be used for simulated-use testing to recommend cleaning protocols for such instruments as well as recommended for healthcare facilities as a method for verifying cleaning effectiveness.
Healthmark offers BactiQuik™, a new prepackaged 1 ML vial of microbial suspensions that can be quickly and easily mixed with ATS to perform validation testing for disinfection and sterilization.

The vials contain a pure population of approximately $1 \times 10^8$ CFU/ML of viable Geobacillus stearothermophilus or Bacillus atrophaeus.

G. stearothermophilus has a known resistance for steam sterilization, and B. atrophaeus for ethylene oxide and dry heat sterilizations.

**BLOOD TEST SOIL (BTS)**

**Quick, easy and affordable**

Blood Test Soil (BTS) is a simple, simulated blood soil that visually mimics blood on the exterior of patient-used instruments. The soil is composed of blood proteins: hemoglobin and albumin, and can easily be used to coat surrogate instruments for cleaning verification with Healthmark’s Proformance™ line of products. It has a long, stable shelf life in its lyophilized form. Just rehydrate with sterile water and it is ready to use.

**KEEP IT CLEAN**

In addition to our products, Healthmark also has the expertise and knowledge to be of assistance in devising tailored cleaning and verification protocols that comply with international standards.