



# Properties



## **FLAME RESISTANT:**

All Sure-Chek healthcare fabrics are flame resistant and self-extinguish when a source flame is removed. These products are manufactured and tested in accordance with accepted industry standards. Additionally, Herculite offers an ultra-high flame resistant fabric: Sure-Chek Blaze Blocker™, an open-flame barrier fabric. This inner liner fabric enables mattresses to pass the California Technical Bulletin 129, Boston Fire Code 9-XII (full-scale open flame, complete mattress burn tests). Sure-Chek Blaze Blocker™ also passes California Technical Bulletin 133 (full-scale open flame, complete chair burn test). There are a variety of flammability test standards used today, please check with our technical representatives to determine which Sure-Chek healthcare fabric is best suited to satisfy your need.

## **ANTIMICROBIAL FABRIC PROTECTION:**

Sure-Chek healthcare fabrics are treated with a proprietary antimicrobial additive designed to slowly release over the life of the product. A controlled release feature allows the migration of the antimicrobial agent to the fabric surface. The antimicrobial agent helps protect the fabric from microbial attack and reduces undesirable organic odors. The fabrics are tested in accordance with (NYS63) involving exposure of microbial cultures to test swatches of treated and untreated fabrics. After exposure, the cultures are incubated and qualified. Reduction of growth in the culture exposed to the treated fabric compared to the culture of the untreated control is reported as a percentage.

## **THERMAL CONDUCTIVITY:**

Determining a material's surface character as being "hot" or "cool" is related to the rate of heat flow from the skin, to the surface in question. Test method ASTM C-177 measures heat flow through flat specimens at a temperature of 95°F. The results are expressed in British Thermal units (Btu) per hour sq. ft. Sure-Chek healthcare fabrics all perform within a desirable range for patient comfort without sacrificing important technical performance benefits.

## **FLUID RESISTANCE & MOISTURE VAPOR TRANSMISSION:**

All Sure-Chek healthcare fabrics are fluid and moisture resistant, reducing the risk of contamination of the mattress or pillow from liquids or bodily fluids. The impermeability of a membrane to water movement as a liquid is assessed by measuring hydrostatic test ASTM D751/A. Moisture vapor transmission is the result of molecular diffusion caused by different levels of humidity on either side of the membrane. The impermeability of a membrane to moisture vapor transmission is measured by (ASTM E96/BW). Sure-Chek healthcare fabrics are engineered to provide optimum resistance to moisture vapor transmission.

## **STAIN RESISTANCE, CLEANING & DISINFECTION:**

Sure-Chek healthcare fabrics resist most staining from medications, oils, grease and contaminants. A simple solution of neutral soap and lukewarm water is all that is required for cleaning Sure-Chek healthcare fabrics. Phenolic or quaternary type disinfectants; provided they are applied in concentrations recommended by the manufacturer may be used satisfactorily. Iodophor (i.e. iodine bearing) type disinfectants may result in staining, if these are not treated with a diluted (10 to 1) bleach solution within 20 minutes of application or spillage. Disinfectants applied at full concentration or in highly concentrated solutions may damage the fabric. Laundering of thermoplastic fabrics is not recommended. Do not use harsh cleansers, solvents or detergents. Detailed cleaning instructions can be provided by our technical representative.

## **HYPOALLERGENIC:**

Sure-Chek healthcare fabrics are hypoallergenic as measured by the Draize Dermal method in which small patches of material are placed in contact with the (shaved and lightly abraded) skin of rabbits. Extensive testing and years of use have revealed no skin irritations or reactions in hospitalized patients, however, Sure-Chek healthcare fabrics are not recommended for direct patient contact.

## **ANTI-STATIC: Electrostatic Resistance**

The Sure-Chek family of healthcare fabrics also feature Anstat<sup>®</sup>, an enduring anti-static property that prevents build-up and retention of electrostatic charges that can interfere with the functioning of sensitive monitoring equipment. Herculite also offers a highly conductive fabric: **Lectrolite<sup>®</sup>** specifically designed for operating rooms and other sensitive environments.

## **TEAR RESISTANCE:**

The thermoplastic surface is reinforced with a textile to provide high tear strength and durability. The tensile strength or breaking force can be measured by either the Grab or Cut strip test methods. The Sure-Chek family of healthcare fabrics are engineered to provide the optimum amount of tensile and tear resistance required for their applications without reducing the performance of other characteristics. Various methods are used to evaluate these properties including: Grab Method, The Cut Strip Method, The Tongue Tear Method and the Adhesion Method. Please check with our technical representatives to determine which Sure-Chek healthcare fabric is best suited to satisfy your needs.

## **ELASTICITY & PRESSURE MANAGEMENT:**

The Sure-Chek Surethane<sup>™</sup> and Sure-Chek Fusion<sup>™</sup>II products are specifically engineered to provide a higher level of elasticity for environments with additional pressure management requirements. Elasticity is often a feature of fabrics used in pressure reduction mattresses. Ideally the fabric will stretch easily to allow body immersion into the supporting surface, and recover to its original dimensions once the load is removed. The Sure-Chek Surethane and Sure-Chek Fusion II family of products are designed to provide a controlled level stretch and recovery. The stress/strain curves for Sure-Chek Surethane and Sure-Chek Fusion II are calculated and elongation of more than 20% occurs at less than 10% of the ultimate load for Sure-Chek Surethane, and 5% of the ultimate load for Sure-Chek Fusion II. This "controlled stretch and recovery" feature helps prevent mattress surfaces from becoming ineffective in the pressure management due to over-elasticity.



**Be the best-in-class supplier, delivering products of exceptional value, distinguished by their quality & reliability, supported by our company's technical expertise and customer dedication.**

### **DISCLAIMER**

This guide is designed to provide appropriate technical information and advice to fabricators and end-users. The information is given in good faith, but because of the many particular factors that are outside our knowledge and control, and affect the use of products, no warranty is expressed or is implied on its accuracy.

**HERCULITE<sup>®</sup>**

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