

HHL TECHNOLOGY **VITAL** PROTECTION

LONG LASTING INSECT
PROTECTION



HHL Technology is an innovative leader in multi-functional fabric technologies.

Our extensive range of fabric applications addresses the needs of an ever growing and demanding market.

Designed to work in harmony with each other, we are extremely confident that one or more of our products will offer your range an enviable technical and marketing advantage:

- PureTex
- BaseTex
- ArmourTex
- Armour+
- BioTex
- Hygiene Protection
- Health Protection
- **Vital Protection**

HHL Technology
United Kingdom
T: + 44 (0)20 3151 2301
South Africa
T: +27 (0)21 100 0036

The Facts

Vital Protection is a unique textile impregnation treatment that can offer long lasting protection against a host of biting insects including mosquitoes, midges, bed bugs, sand flies and fleas.

Biting insects are not just an inconvenience, but they also pose a serious health risk. Not only will biting insects cause painful, itchy bites but also life-threatening diseases such as Malaria, Dengue Fever and West Nile Virus.

Vital Protection is up to 90% effective in repelling blood feeding and bites, giving the user peace of mind that they can 'Adventure Safely'.

The range of applications for **Vital Protection** is unlimited as people travel to further and more exotic destinations and as the spread of diseases contracted from biting insects only increases.

In addition to giving the end user essential health protection and peace of mind, **Vital Protection** also inhibits odour-causing bacteria and fabric degradation – 3 enviable benefits in one *vital* product!

Key Advantages

- Drastically reduces and prevents health risks associated with insect bites
- Anti-bacterial
- Inhibits fabric degradation
- Durable, long lasting effectiveness
- Cost effective
- No negative impact on fabric handle - especially when used in harmony with HHL Technology's BaseTex softening systems
- Environmentally responsible – state of the art effectiveness means you wash it fewer times (saving energy and water) and the garment lasts longer (meaning you get to wear it more and replace it less)
- **Vital Protection** chemistry is safe and environmentally friendly
- Proven effectiveness and independent recommendations



How Does It Work?

Vital Protection's active ingredient is permethrin – a totally safe, but highly effective chemistry. Within nature, certain flowers, such as those of the chrysanthemum are used to make a repellent with almost identical properties. Permethrin is a synthetic version of this naturally occurring organic protection. It is odourless and with correct practice has no negative effective on the environment or garment/equipment to which it is applied.

This unique chemistry, which we have successfully developed to be incorporated into fabrics, immediately repels insects as their nervous system detects a threat. In most cases when mosquitoes and other biting insects sense this repellent, they are immediately deterred and fly off to find a tastier victim! **Vital Protection** thus safeguards the wearer from nasty bites and potential disease.

Application

Vital Protection is ideal for:

- ✓ **Sport & Active Wear** Trousers, shorts, t-shirts, shirts, skirts, base layers, coats, hats, socks, shoes
- ✓ **Outdoor Gear** Tents, bags, sleeping bags, travel towels, mosquito nets
- ✓ **Home Textiles** Bed linen, mattresses, duvets, pillows, curtains, cushions, rugs, carpet
... and a swarm of other applications!

Technical Advantages

- **Vital Protection** can be applied by pad, exhaust, spray and foam methods
- Suitable for most substrates
- Excellent washing durability
- It has no negative impact on moisture transport/wicking
- No negative effect on the feel and touch of the fabric
- Safe and non toxic chemistries
- Suitable for a broad ranging application – with our technicians on hand for first class technical support

The Vital Protection Family

- Vital Protection 1** A broad acting isothiazolinone anti-microbial finish combined with a proven insect inhibitor, specifically designed for textile finishing applications
- Vital Protection MB** Master batch options are also available for highly durable effects in yarn manufacture

Contact Us

Technical and independent testing information is available on **Vital Protection** as well as further marketing materials. Please request by calling **HHL Technology** on +44 (0)20 3 151 2301 or via email at info@hhltechnology.org