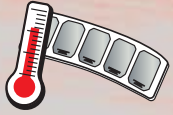# How to use and apply ESTROTECT™
Critical for Best Results

KEEP HEAT DETECTORS WARM

The detector should be warmed to 100°F or 38°C immediately prior to application. This activates the adhesive and provides instant adhesion at lower temperatures. This can be done in numerous ways including putting next to your skin **until they are soft and flexible**. Warming inside clothing is okay for small quantities. For large quantities put the detectors in a small cooler with a hot water bottle or other heat source, as this is more effective and consistent. The ESTROTECT™ Heat Detector should be soft and flexible at application for optimal adhesion.

SITE OF APPLICATION

Ideal location for placement on the cow is halfway between the hip and tail head with ESTROTECT™ evenly spaced perpendicular to the spine.

BRUSH HAIR THOROUGHLY

Create optimal conditions for adhesion by vigorously brushing the coat across the backbone on the back half of the cow. Brush with the grain of the hair to remove dirt, dust and shedding hair. The ESTROTECT™ Rubber Brush is recommended, as it does not raise excess dust and oil.

Note: Protect detectors from tail flicking by placing them near the top of the tail when fly counts are high.

CLEAN THE HAIR

Clean the surface area with an ESTROTECT™ Cleaning Cloth to completely remove any remaining dirt, dust, sand or sawdust. As with brushing, wipe with the grain of the hair and fold the cleaning cloth as needed. The ESTROTECT™ Cleaning Cloth is effective as long as it is sticky. A painter tack cloth may be used as an alternative if the ESTROTECT™ Cleaning Cloth is not available.

HEAT DETECTOR APPLICATION

Place heat detector on the application site, press down firmly and rub into hair with bare fingers. Do not apply in rainy weather.

CHECK FOR RESULTS

BREED **DON'T BREED**

When cows have been mounted, the detector's silver surface is rubbed off by the friction of the mounting and will begin to show the indicator colour (red/orange, green, blue, yellow or fuchsia). With each mount, the surface will gradually turn from silver to its indicator colour indicating a true standing heat. (Approximately 50% of the silver rub-off coat removed should indicate standing heat.) When the ESTROTECT™ detector is activated by mounting activity, the indicator colour should appear very shiny and polished. Indicator colour will be less prevalent in high stress environments, hot weather, high production or in crowded conditions as cows may be less inclined to mount.

Various programs using the different colours exist – Use a different colour for each insemination to define how many times the animal has been bred. A comprehensive management program can be downloaded from www.estrotect.com.

The ESTROTECT™ Guarantee

We are so confident that ESTROTECT™ Heat Detectors will have a positive impact on your breeding program, if you use the product and do not get equal or better results than your previous heat detection method, we will either replace the product or refund the purchase price – your choice.*

For more information on ESTROTECT™ Heat Detectors visit www.estrotect.com or call +44 (0) 1489 894447.

Dairymac Limited
Lake View | Unit C - Waltham Business Park | Brickyard Road
Swanmore, Southampton | SO32 2SA
Tel/Fax: +44 (0) 1489 894447 | sales@dairymac.com
www.dairymac.com

WARRANTY STATEMENT

This product is guaranteed free of defects in material and workmanship for two years from the date of manufacture. Suitability of the product for the Buyer's intended purposes is the responsibility of the Buyer. Liability is limited to the replacement value of the product.

ESTROTECT™
HEAT DETECTOR

MOUNTING EVIDENCE™
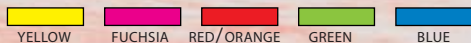### AS GOOD AS A BULL™

BREED

DON'T BREED

Available in 5 colours

More Rubs
=
More Mountings
=
Maximum Opportunity for Pregnancy

About ESTROTECT™ Heat Detectors

- Simple and convenient "rub-off" technology
- Economical
- Highly effective
- Management tool for AI programs or embryo transfer recipients
- Available in five fluorescent colors

| YELLOW | FUCHSIA | RED/ORANGE | GREEN | BLUE |

AVAILABLE IN 5 COLOURS!

Just how effective are ESTROTECT™ Heat Detectors?

A 2005 South Dakota State University study showed heat detection accuracy using ESTROTECT™ Heat Detector rub-off technology to be equally as accurate as bulls and vigorous visual observation (every 3 hours / 24 hours a day / 7 days a week). There is simply no heat detection product that effectively shows evidence of standing heat better than ESTROTECT™ Heat Detectors.

Observation	Vigorous Visual Observation	Bull	Rub-Off Technology
% identified correctly	**92% (83/90)**	**92% (34/37)**	**91% (82/90)**
% identified incorrectly	8% (7/90)	8% (3/37)	9% (8/90)
% suspect	2% (2/90)	3% (1/37)	2% (2/90)
% identified in standing estrus	97% (67/69)	100% (34/34)	97% (66/68)
% identified in standing estrus that ovulated (including ovulated animals)	97% (69/71)	100% (35/35)	97% (68/70)

ESTROTECT™ Heat Detectors help confirm pregnancies in both AI and natural service operations.

In a 2013 South Dakota State University study, ESTROTECT™ Heat Detectors were used in a timed-AI beef cattle trial that compared its success in confirming pregnancies to blood-based tests analyzed by three different labs. The results showed that ESTROTECT™ Heat Detectors performed better than or equal to blood-based tests in confirming pregnancy.

	Blood Test 1	Blood Test 2	Blood Test 3	ESTROTECT™ Heat Detectors
Ability to correctly identify pregnant animals (P=0.14)	98%	97%	95%	**99%**
Ability to correctly identify non-pregnant animals (P=0.09)	67%	82%	87%	**82%**
Overall Test Accuracy (P=0.25)	86%	89%	92%	**92%**

"Comparison of Four Methods to Determine Pregnancy Success in Beef Cattle" South Dakota State University. 2013.