

## INDICATIONS

For increasing the percentage of *heifer* calves in dairy and beef cattle.

## DOSAGE

One unit (0.25mL or 0.50mL) of semen per vial.

## NOTICE

This is not a restricted drug. HEIFERPLUS is a non-prescription biopharmaceutical agent. Federal law *does not* require that this product be used by or on the order of a licensed veterinarian.

## DESCRIPTION

HEIFERPLUS is spermagenic agent for sexing bull semen. Packaged in kit form, each dose is sealed in a vial to maintain potency during storage. The agent is activated by adding semen directly to the HEIFERPLUS vial. The sexed semen is returned to the original straw and inseminated as usual.

## MODE OF ACTION

HEIFERPLUS works by enhancing the fertility of the X-chromosome bearing (female) sperm. When inseminated, the sperm are sorted in the reproductive tract of the dam. The result is more ova fertilized by the X-chromosome bearing (female) sperm. The percentage of heifer calves is increased by 20-25%.

## KIT INSTRUCTIONS

- Warm HEIFERPLUS vial to 95-98.6°F (35-37°C) to prevent cold shock to semen. Thaw semen as usual.
- Cut the straw at a 60° bevel using a good pair of sharp scissors.
- Insert the cut-end of semen straw through the rubber septum into the HEIFERPLUS vial.
- Add semen to vial by grasping both the vial and straw in the palm of the hand and "shaking" downward 3 or 4 times (similar to shaking a glass thermometer). Be certain all semen is in vial.
- Gently mix semen with contents of vial.
- Transfer enriched semen from the vial back into the straw. Do this by grasping vial and straw in an inverted position and "shaking" downward 3-4 times. Be certain all semen is transferred to straw.
- **IMPORTANT:** Incubate the semen in water bath for 15-20 minutes at 95-98.6°F (35-37°C).
- Remove from water bath, dry, and cut the bevel from straw. Load into insemination gun and inseminate as usual.

Note: During incubation, keep vial attached to the straw. This will protect semen from exposure to air and water.

## INSEMINATION

- When breeding from a natural or synchronized heat: Use frequent heat detection (4-12 times/day) when using this product. Inseminate according to AM-PM guidelines (12-14 hr. following first standing heat). Note: With less frequent heat detection (1-2 times/day), breed at 6-8 hr. following first heat.
- When breeding using OVSYNCH<sup>®</sup>: Breed 16-20 hr. after the last GnRH injection. Not recommended with appointment breeding.
- When breeding super-ovulated heifers and cows: Inseminate at 12 hr. and 24 hr. following first standing heat using multiple dose insemination when needed. Not recommended for breeding at standing heat (0 hr).

## STORAGE CONDITIONS

Store product in refrigerator (5°C) for up to 1 yr. For long-term storage (up to 2 yrs) keep in freezer (-20°C). Avoid sunlight. Reseal unused product in packet during storage.

## HOW SUPPLIED

HEIFERPLUS is lyophilized in the following package sizes: 0.25mL, 0.50mL and 1mL vials.

## WARNINGS

**FOR ANIMAL USE ONLY. NOT FOR HUMAN USE. KEEP OUT OF REACH OF CHILDREN.**

Manufactured by:

## EMLAB GENETICS

Arcola, IL 61910 USA

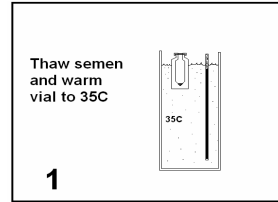
For more information, please call 708-442-3964 or log on to [www.emlabgenetics.com](http://www.emlabgenetics.com)

HEIFERPLUS<sup>®</sup> is a registered trademark of **EMLAB GENETICS**

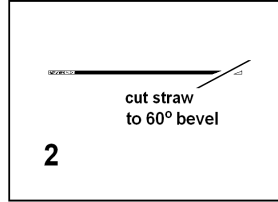
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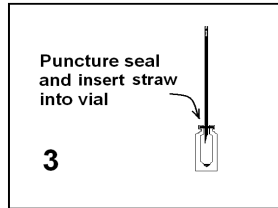
## KIT INSTRUCTIONS



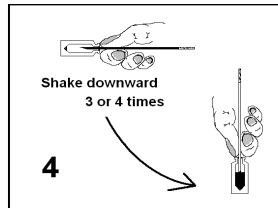
1. Warm the vial to 95-98.6°F (35-37°C) using a water bath, tube warmer or incubator for a few minutes (to prevent cold shock). Thaw semen as usual.



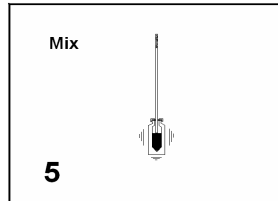
2. Remove from water bath. Dry. Cut straw to a 60° bevel with sharp scissors.



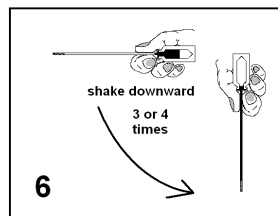
3. Puncture seal with straw bevel and insert the cut-end of the straw into the vial.



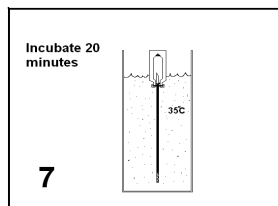
4. To add semen to the vial, grasp both the vial and straw in the palm of the hand and "shake" downward 3 or 4 times (similar to shaking a glass thermometer). Be certain all semen is in the vial.



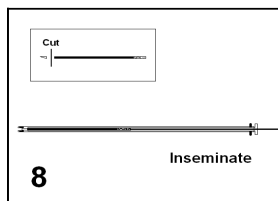
5. Gently mix semen with contents of vial.



6. Transfer the enriched semen from the vial back into the straw. Do this by inverting the vial and straw, and "shaking" downward 3-4 times. Be certain all semen is in the straw.



7. **IMPORTANT!** Incubate enriched semen at 95-98.6°F (35-37°C) for 15-20 minutes.



8. Remove straw from water bath. Dry. Cut bevel from straw. Load straw into insemination gun. Inseminate as usual.