



## Caprine semen sexing agent – MALE

PRODUCT NO: BGP050

### INDICATIONS

For increasing the percentage of male offspring in goats.

### DOSAGE

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

### NOTICE

This is not a restricted drug. BILLYPLUS 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

BILLYPLUS is spermagenic agent for sexing caprine 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 BILLYPLUS vial. The sexed semen can be returned to the original straw and inseminated as usual.

### MODE OF ACTION

BILLYPLUS works by enhancing the motility/fertility of the Y-chromosome (male) sperm and reducing the motility/fertility of the X-chromosome (female) sperm. When inseminated, the sperm sort in the reproductive tract of the doe. The result is more ova fertilized by the Y-chromosome (male) sperm. The percentage of male offspring is increased 20-25% (Ave.75%).

### KIT INSTRUCTIONS

- Warm BILLYPLUS vial to 95-98.6°F (35-37°C) to prevent cold shock to semen. Thaw semen as usual.
- Cut the end of semen straw at a 60 degree bevel
- Insert the cut-end of semen straw through the rubber septum in the BILLYPLUS vial.
- Add semen to vial by grasping both the vial and straw in the palm of the hand and snapping downward 3-4 times (similar to shaking a glass thermometer). Be certain all semen is in vial.
- Gently mix semen with contents of vial.
- When inseminating with straws, transfer the enriched semen back into the original straw by inverting and then shaking downward 3-4 times. When using laparoscopic insemination, incubate and store semen in vial.
- IMPORTANT: Incubate the enriched semen in water bath for 10-20 minutes at 95-98.6°F (35-37°C) prior to insemination.
- Load semen into insemination pipette/gun and inseminate. Follow the guidelines below regarding timing of insemination.

### TIMING OF INSEMINATION

Variations in synchronization protocols, superovulation regimens and species differences will give rise to variations in the *time of onset of heat* and *time of ovulation*. These variances are important when using fixed-time breeding. For fixed-timed inseminations, please consult the following recommendations. In general, apply BILLYPLUS 12 hours prior to ovulation or 12-24 hours following onset of heat. Please note: Ovulation in caprine species occurs 24-36 hours after onset of heat.

Synchronized with progestin implant (CIDR®, pessary sponge, Synchro-Mate B®):

- Fixed-timed inseminations: Breed 48 hours after progestin withdrawal.

Synchronized with progestin implant (CIDR®, pessary sponge, Synchro-Mate B®) + PMSG (Folligon®) or equine chorionic gonadotrophin (eCG):

- Fixed-timed inseminations: Breed 42 hours after progestin withdrawal.

Superovulated with progestin implant (CIDR®, pessary sponge, Synchro-Mate B®) + FSH (Pluset®, Follitropin-V®):

- Fixed timed inseminations: Breed 24 hours after progestin withdrawal.

Synchronized with progestin implant (CIDR®, pessary sponge, Synchro-Mate B®) + prostaglandin (LUTALYSE® or ESTRUMATE®):

- Fixed timed insemination: Breed 56 hours after progestin withdrawal.

Synchronized heats and natural heats:

- Estrus detection: Breed 12 hours after onset of heat.

### STORAGE CONDITIONS

Keep in freezer compartment (-4°F; -20°C). Avoid moisture and sunlight. Reseal unused product in packet during storage.

### HOW SUPPLIED

BILLYPLUS is lyophilized in the following sizes: 0.25 ml. and 0.50 ml single-dose & 10 U, 20 U, and 50 U multi-unit vials

### WARNINGS

KEEP OUT OF REACH OF CHILDREN.

Manufactured by:

EMLAB GENETICS, LLC - Arcola, IL 61910 USA - [www.emlabgenetics.com](http://www.emlabgenetics.com)

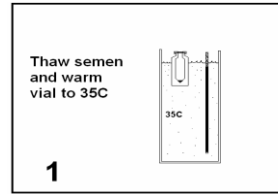
Questions? Call 708-442-3964

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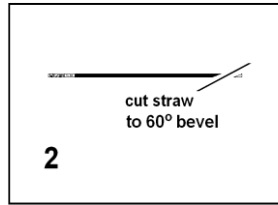
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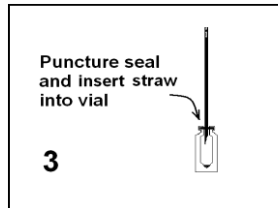
## KIT INSTRUCTIONS



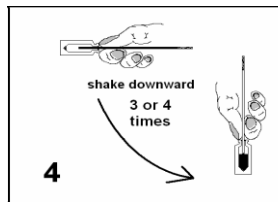
1. Warm the vial to 95-98.6°F (35-37°C) using a water bath, tube warmer or incubator for a few minutes (to prevent cold shock). Thaw semen as usual.



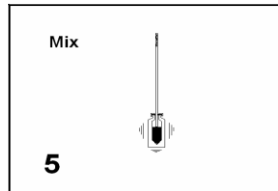
2. Cut straw to a 60° bevel with sharp scissors. Note: Remove paper label from top of vial.



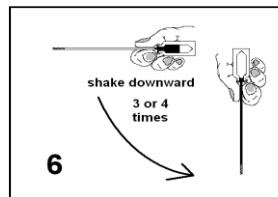
3. Puncture seal with 14 G needle and insert the cut-end of the straw into the vial.



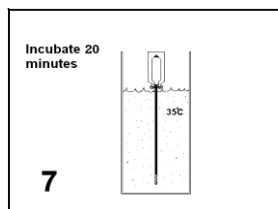
4. To add semen to the vial, grasp both the vial and straw in the palm of the hand and shake downward 3 or 4 times (similar to shaking a glass thermometer). Be certain all semen is in the vial.



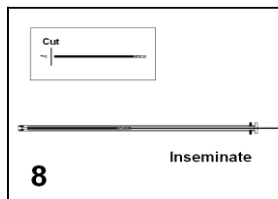
5. Gently mix semen with contents of vial.



6. Transfer the enriched semen from the vial back into the straw. Do this by grasping the vial and straw in an inverted position and again 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 10-20 minutes.



8. Remove straw from water bath. Dry. If necessary, cut bevel from straw. Load straw into insemination gun. Inseminate according recommended protocols.