

A.I. Recommendations and Semen Handling for



Preparation

- ✓ Check semen inventory in tank regularly
- ✓ Label tank with content of each canister
- ✓ Maintain inventory records of each canister
- ✓ Keep materials clean and in working condition

13-23 hrs

A.I. with Gender-Sorted Semen
13-23 hours after first signs of
standing heat or after ovulation
induction treatment (GnRH).*



Daily

Change thaw bath water daily
to ensure cleanliness.



Regulate

Use temperature regulated thaw
bath to properly thaw units.



Weekly

Clean thaw bath weekly to ensure
hygiene and keep in proper working
condition.



95° to 98°F

35° to 37°C

Monitor water temperature
in thaw bath with thermometer
at the specified temperature.



45 Seconds

Thaw semen for approximately
45 seconds.



15 minutes

Both GENDER-SORTED and
CONVENTIONAL semen must be used
within 15 MINUTES of thawing.



Remove

DO NOT TOUCH STRAW WITH HANDS!
Remove straw from thaw bath with
tweezers, and dry with clean towel.



Transport

Load straw into a pre-warmed
A.I. gun and keep in an A.I. gun
warmer at 95° to 98°F (35° to 37°C).



Wrap the loaded A.I. gun in a paper
towel or sheath cover and keep it
at the recommended temperature.



Insemination

*Timing of A.I. based on: Santos, V.G., et.al (2025), Effect of timing of artificial insemination with conventional or sex-sorted semen on fertility of lactating dairy cows. Journal of Dairy Science, 108(8):8945-8958. <https://doi.org/10.3168/jds.2025-26428>

1

A.I. with sexed semen **13-23 hours** after first signs of standing heat, same as conventional

2

Use temperature regulated thawing units at **95-98°F (35-37°C)**

3

Change thawing unit water daily

4

Monitor water temperature with a thermometer:
95-98°F (35-37°C)

5

Clean thawing unit weekly
and keep the equipment sanitized

6

Thaw for approximately **45 seconds**

7

Maintain semen at **95-98°F (35-37°C)**
using an A.I. gun warmer

8

Use thawed semen within **15 minutes** of initial thaw

As recommended by: Santos, V.G., et.al (2025), Effect of timing of artificial insemination with conventional or sex-sorted semen on fertility of lactating dairy cows. Journal of Dairy Science, 108(8):8945-8958. <https://doi.org/10.3168/jds.2025-26428>