SWINE REPRODUCTION SOLUTIONS
Estrus is 21 days.

*0 day = heat detection and standing heat (boar exposure was successful, she is now standing rigid, her ears are erect and vulva may be showing signs of arousal)

Once standing heat is observed, inseminate within 15-50 minutes after boar exposure.

If the sow remains in standing heat, reinseminate every 24 hours.

If the sow does not show signs of standing heat, the producer will need to determine if the sow should be bred or culled.

When heat checking, if the inseminated sow returns to estrus, she will exhibit standing heat. The producer will need to determine if the sow should be rebred or culled.

If the sow does not return to estrus between 18-25 days post breeding, then there is a 75-85% chance she is pregnant and should be moved to the gestation area.

Example of sow in standing heat. Ears are erect, legs are rigid and vulva is swollen.

Reproduction success can be achieved by a number of different methods. Choosing for farrowing rate, litter size, and lactation quality from your maternal line may give you more pigs per sow per year. And when selecting from a terminal line, you may select for average daily gain, feed efficiency, and meat quality. However, with the perfect genetic makeup, do you have the right tools to create the perfect pig?

With Neogen’s line of reproductive products, producers can be assured that their genetic selection carries through to the next litter. No matter how your operation is managed, Neogen can provide you with reproductive expertise and instruments to cater to your needs including natural service, artificial insemination (AI), and post-cervical artificial insemination (PCAI).

Estrus is 21 days.

-5 Day  -4 Day  -4 to -1 Days  -1 Day  0 Day  1 Day  2 Day  3 Day  18-25 days†

Weaning  Heat check and initial insemination  Reinseminate females who remain in standing heat  Pregnancy check

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Traditional Artificial Insemination

Traditional AI has been used since the 1990s, allowing producers to select for genetic traits to produce leaner carcasses. Knowing how the female reproductive tract impacts the physiology of the sperm cell, producers were able to bypass the initial cervical hurdles by using less semen and fewer boars than natural services.

Advantages
- Sanitation less of a concern
- Higher volume of extender reduces temperature fluctuation

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>334886</td>
<td>Spiral white catheter with handle and plug</td>
</tr>
<tr>
<td>334893</td>
<td>Spiral blue catheter without handle</td>
</tr>
<tr>
<td>333117</td>
<td>Green sow foam catheter with handle and plug</td>
</tr>
<tr>
<td>333124</td>
<td>Green sow foam catheter without handle</td>
</tr>
<tr>
<td>334855</td>
<td>White foam catheter with handle and plug</td>
</tr>
<tr>
<td>334848</td>
<td>White foam catheter without handle</td>
</tr>
<tr>
<td>334879</td>
<td>Green gilt foam catheter with handle and plug</td>
</tr>
<tr>
<td>334862</td>
<td>Green gilt foam catheter without handle</td>
</tr>
</tbody>
</table>

Post-Cervical Artificial Insemination

PCAI is used to capture superior genetics in your swine herd by selecting for improved growth rates, feed efficiency, and carcass quality while delivering less sperm per insemination. With Neogen’s PCAI catheters, we can help combine those superior genetics with little to no hindrance from the sow’s reproductive tract.

Keeping biosecurity in mind, Neogen’s PCAI catheters are all preassembled and packaged in an easy tear bag to prevent catheters from spilling out upon opening. Furthermore, when removing the catheters from the bag, the inner rod will not slip out of the outer protective catheter, helping to maintain a sanitary product prior to insemination. The unique design of Neogen’s PCAI catheters also allows the breeding technician to feel when the inner rod is flush with the outer rod, keeping out the guess work.

Advantages
- Fewer boars per same number of sows
- Finer selection of higher estimated breeding value (EBV) boars
- Increased production performance in finishing pigs
- Less sperm cells, less extender, less semen

<table>
<thead>
<tr>
<th>Item No.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>369826</td>
<td>Green/White Gilt Foam PCAI Catheter with Printed Lot Number</td>
</tr>
<tr>
<td>369833</td>
<td>Pink/White Sow Foam PCAI Catheter with Printed Lot Number</td>
</tr>
<tr>
<td>352316</td>
<td>White Foam PCAI Catheter</td>
</tr>
<tr>
<td>370242</td>
<td>Inner Rod Only</td>
</tr>
</tbody>
</table>
### Semen Collection

Neogen provides a number of products to ensure the insemination process is completed successfully. From non-spermicidal gloves and sleeves to sperm bottles and lubrication, Neogen delivers on your reproduction needs.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT550PF-M</td>
<td>Vinyl PF Non-Spermicidal</td>
<td>100/bag Wrist Length Double bagged</td>
</tr>
<tr>
<td>AT550PF-L</td>
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<tr>
<td>AT550PF-XL</td>
<td></td>
<td></td>
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<tr>
<td>AT550PF-XXL</td>
<td></td>
<td></td>
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<tr>
<td>PS151</td>
<td>PolyShield™ 0.8 Purple</td>
<td>200/box Shoulder Length</td>
</tr>
<tr>
<td>P100</td>
<td>PolySleeve® 1.1 Buff</td>
<td>100/pk Shoulder Length</td>
</tr>
<tr>
<td>P125</td>
<td>PolySleeve® 1.25 Blue</td>
<td>100/pk Shoulder Length</td>
</tr>
<tr>
<td>SP100</td>
<td>PolySleeve® Sterile</td>
<td>12/pk Small Hands</td>
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<tr>
<td>SP125</td>
<td></td>
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<tr>
<td>SP125-S</td>
<td></td>
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</tr>
<tr>
<td>79212</td>
<td>General Lube 8 oz &amp; 1 gallon</td>
<td>To be used in AI Typically applied to the foam tip of the outer rod</td>
</tr>
<tr>
<td>79213</td>
<td></td>
<td></td>
</tr>
<tr>
<td>334909</td>
<td>Semen Bottle 100 mL</td>
<td>Break-Away, Multi-Color Tip and Caps Easy to squeeze bottles</td>
</tr>
</tbody>
</table>

INSEMINATION ACCESSORIES

Neogen • 944 Nandino Blvd. • Lexington, KY 40511 • inform@neogen.com • animalsafety.neogen.com
**Prima® Marking Paints and Dyes**

After a teaser boar has passed through the barn, you will want to identify the females that are in standing heat or after successful insemination you may want to mark them appropriately to avoid wasting semen. Using one of Neogen’s many forms of marking paints will help you easily manage your reproduction system for days.

**Advantages**
- Colors are durable and stable
- Reliable in all temperatures
- Strong color with high luminosity
- Inverted tips spray upside down

### Item No. | Product Description
---|---
333643 | Prima Twist Stick Marker - Black
333650 | Prima Twist Stick Marker - Orange
333667 | Prima Twist Stick Marker - Red
333674 | Prima Twist Stick Marker - Green
333681 | Prima Twist Stick Marker - Blue
333704 | Prima Twist Stick Marker - Purple
333711 | Prima Twist Stick Marker - Pink

**Description**
Retractable Marking Sticks
Available in premium plastic dispensers
Marks wet or dry pigs

### Item No. | Product Description
---|---
338693 | Prima Spray On Glo - Fluorescent Green
338389 | Prima Spray On Glo - Fluorescent Orange
339690 | Prima Spray On Glo - Fluorescent Purple
339942 | Prima Spray On Glo - Fluorescent Pink
339959 | Prima Spray On Glo - Fluorescent Yellow

**Description**
Strong color with high luminosity
Sprays upside down

### Item No. | Product Description
---|---
333513 | Prima Spray On - Red
333520 | Prima Spray On - Blue
333537 | Prima Spray On - Green
338747 | Prima Spray On - Black

**Description**
Original formulation
Most economic value

### Item No. | Product Description
---|---
354228 | Prima Spray On II - Red
354235 | Prima Spray On II - Blue
354242 | Prima Spray On II - Green

**Description**
Longer lasting

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To order, or for additional product information, call 859-254-1221 or 800-621-8829 (USA and Canada)
Founded in 1982, Neogen® Corporation (NASDAQ:NEOG) has grown to be a worldwide presence with more than 1,600 employees in multiple U.S. and international locations. Neogen develops, manufactures and markets a diverse line of products dedicated to food and animal safety.

Neogen’s Lexington, Ky.-based Animal Safety Division develops and markets a complete line of diagnostics, veterinary instruments, veterinary pharmaceuticals, nutritional supplements, insecticides, disinfectants, rodenticides, and genomic solutions.

The company’s Lansing, Michigan-based Food Safety Division develops and markets dehydrated culture media and rapid diagnostic test kits to detect foodborne bacteria, spoilage organisms, mycotoxins, food allergens, genetic modifications, drug residues, plant diseases, and sanitation concerns.

**Cleaning and Disinfecting Products**

Neogen’s acquisition of Preserve International® in 2016 further broadens the comprehensive list of preventative animal health disinfectant and cleaner products Neogen can offer to animal producers and veterinary clinics. Now supplying a wide-range of chemistries and presentations, including disinfecting aerosols, surface wipes, hand sanitizers, liquid concentrates, and many more.

**Veterinary Instruments and Supplies**

Neogen’s Ideal® Instruments subsidiary is a leading developer of precision veterinary drug delivery instruments to help minimize drug residues in meat and milk supplies by accurately administering the dose. The company’s line of patented detectable needles greatly lessens the chance that a broken needle would ever arrive for supper, helping to ensure food safety from the farm gate to the dinner plate.
NEOGEN MAKES BIOSECURITY EASIER

Pest Control Products

Neogen’s proven line of rodenticides and insecticides are used to effectively control rodent and flying and crawling insect infestations. Pest control is often a critical component of an overall biosecurity program and should not be overlooked when implementing a plan.

Insect Control

- **Prozap® LD-44Z**
  - 0.5% Pyrethrin

- **Prozap® Annihilator-XP**
  - 4% PBO

Rodent Control

- **Havoc®**
  - Brodifacoum

- **Ramik®**
  - Diphacinone

- **CyKill™**
  - Bromathalin

Sanitation

Neogen’s AccuPoint® Advanced Sanitation Monitoring System quickly and easily measure the ATP collected from food contact surfaces or liquids as an indication of the cleanliness of the surface or purity of the liquid.

AccuPoint® Advanced System