

Next Generation[®] Semen Extenders

Universal Formula and/or Dr. Kenney's Formula

All *Next Generation*[®] Semen Extenders are manufactured under the strict GMP protocol in an FDA approved facility. Each batch of extender is guaranteed for a specific Osmolarity, pH, and pre-tested using stallion semen for motility & longevity. We strongly advise that every stallion be thoroughly examined prior to the start of breeding season and tested utilizing various antibiotic combinations. This procedure should also be conducted periodically throughout the breeding season in order to maximize reproductive efficiency of your stallion.

Directions for Use

1. Shake contents from the top of the pouch, so that none of the powdered formula is accidentally spilled and/or left in the package when the top edge is removed.
2. The pH and Osmolarity are specific to the total wet and dry ingredients of the formula; altering either volume dramatically changes one or both factors to where extender performance can be dramatically altered.
3. The purified water used in our *Next Generation*[®] Semen Extenders is guaranteed as long as the seal is not broken and/or expiration of the product does not exceed 12 months from date of purchase.
4. Add the contents from the *Next Generation*[®] powdered formula pouch exclusively into a bottle of the *Next Generation*[®] Purified Sterile Water. Replace the cap tightly onto bottle, invert and wait 20 minutes prior to use.

Dosage Recommendations

1. We recommend that a dose of semen contain 25 million sperm per extended milliliter (mL) and/or a total sperm concentration of minimum of 750 million progressively motile sperm.
2. Another extension variation is 1 part semen to 5 parts extender; this guarantees that the seminal plasma content will not to exceed 20% seminal plasma in the final extended volume. This is an acceptable base environment
3. The total semen concentration should not be diluted to less than 20 million sperm per extended milliliter.

Extension Recommendations

1. We recommend that you store our *Next Generation*[®] Semen Extenders at room/ambient temperature; we do not recommend carrying over extender from one season to the next.
2. Allow the freshly collected semen to cool to that same room/ambient temperature prior to extension.
3. Adding freshly collected raw semen that has already begun to cool, to a warmed and/or cold extender solution will subject the raw semen to reverse shock damaging the acrosome, thus reducing overall fertility.
4. Allowing both the semen & extender to naturally arrive at your room/ambient temperature, will reduce excessive semen manipulation, thus increasing the expected fertilizing potential of your stallion.

Extender Storage

1. *Next Generation*[®] Semen Extenders are designed that once reconstituted to last no longer than 96 hours or 4 days under refrigerated conditions at 8° C or 40° F.
2. If the reconstituted extender is not used within 60 minutes, immediately place under refrigerated conditions.
3. Freezing extenders is common place; although, we discourage this theory because freezing changes the molecular structure of all components thus risking an incompetent solution post thaw.

Centrifugation Protocols

1. If the concentration of raw semen is too dilute, the semen should then be centrifuged.
2. Normal centrifugation protocols are to extend at a 1:1 ratio and centrifuge at 500 x g for 12 - 15 minutes.
3. The excess seminal plasma is then removed and the sperm pellet should be resuspended to achieve a 25 - 35 million total sperm concentration per extended milliliter using fresh extender.
4. A stallion with a concentration of less than 100 million sperm per milliliter (mL) is usually considered grounds for centrifugation, unless the total volume of the ejaculate is less than 15 mL; he is then considered infertile.

Disclaimer

1. All *Next Generation*[®] Semen Extenders are pre-tested and guaranteed to perform under normal circumstances utilizing the extension protocols as outlined above. We cannot guarantee the performance if the proper collection and processing protocols are not followed as recommended by Texas A&M University.
2. When our *Next Generation*[®] Semen Extenders are utilized, Exodus Breeders Corporation will not guarantee the fertility of a stallion, we have no control over genetics and/or environmental conditions outside of our influence.