

# Alpha – I.U

Alpha – IU is an intra-uterine solution

**Composition:** Purely natural product.

**Background:** The product was originally developed in 2006 by a team of medical doctors and pharmacists to treat uterine infections in women when the routine treatments had little or no response. The same patients responded very well to the natural treatment with no side effects. The product was then modified by adding 2 more natural ingredients for treatment of uterine infections in cattle. Alpha – IU is natural product which has been developed for use in veterinary practice. It acts by killing a broad range of gram +ve and gram –ve bacteria in a natural way.

**Indications: Treatment and prevention of uterine infections:** It can be used as a curative and preventative agent against uterine infections resulting due to trauma and lacerations during calving followed by bacterial infection.

**Prevention: First day** after calving: **25 ml** of the working solution to be placed intra-uterine along with the normal fresh cow protocols. Monitor fresh cows for daily uterine discharge and appetite.

**Treatment:** If uterine infection is observed, use Alpha – IU daily along with the routine fresh cow treatment protocols. Use the product for 4 consecutive days, wait for 3 days and repeat as needed.

In acute metritis 100 ml of the solution should be given for up to 3 days. The infected cow should be checked for toxic uterine discharges daily. The treatment should be continued as long as the toxic discharges are present.

**Dosage/mixing instructions:** Add **8 ml** of Alpha IU to **17 ml of distilled water** to make **25 ml** solution. If more cows need treatment, add **1 bottle** of Alpha IU concentrate to **500 ml** of distilled water to make **30 doses** of the solution.

**Administration Route:** intra-uterine. Place **25 ml** of the solution in the uterus. The infusion should be placed in the uterus by using the Patented SOFT TIP® Pipette supplied with the product.

**Special Precautions:** Use distilled water from an authentic source only. Do not use or add any other product in the uterus when using Alpha – I.U

**Packaging:** 250 ml bottle

**Milk Withdrawal Time:** Nil

**Meat Withdrawal Time:** Nil

| Test organism                    | Source  | Alpha I.U (lassis) test concentration |      |    |      | MIC % |
|----------------------------------|---------|---------------------------------------|------|----|------|-------|
|                                  |         | 5%                                    | 2.5% | 1% | 0.5% |       |
| <b><u>Aerobic bacteria</u></b>   |         |                                       |      |    |      |       |
| <i>Escherichia coli</i>          | Bovine  | + <sup>1</sup>                        | +    | +  | +    | >5    |
| <i>Salmonella sp</i>             | Porcine | + <sup>1</sup>                        | +    | +  | +    | >5    |
| <i>Pasteurella multocida</i>     | Bovine  | -                                     | +    | +  | +    | 5     |
| <i>Staphylococcus aureus</i>     | Bovine  | +                                     | +    | +  | +    | >5    |
| <i>Streptococcus uberis</i>      | Bovine  | + <sup>1</sup>                        | +    | +  | +    | >5    |
| <i>Bacillus licheniformis</i>    | Bovine  | + <sup>1</sup>                        | +    | +  | +    | >5    |
| <b><u>Anaerobic bacteria</u></b> |         |                                       |      |    |      |       |
| <i>Fusobacterium necrophorum</i> | Bovine  | -                                     | +    | +  | +    | 5     |
| <i>Peptostreptococcus sp</i>     | Bovine  | -                                     | -    | -  | +    | 1     |
| <i>Arcanobacterium pyogenes</i>  | Bovine  | -                                     | +    | +  | +    | 5     |

- + Normal growth  
+<sup>1</sup> Reduced growth  
- No growth

Sir, I have the following questions

1. The lab was only able to work with MIC = 5% and our product is 14%. What is the antibacterial activity at 14%
2. The bacteria most commonly related to uterine infections especially in Pakistan are Brucella, Leptospira, vibrio, campylobacter, strepto and staphylo to name some of them. What is the effect of this product on these bacteria at 14% concentration
3. Can the product be diluted with Normal Saline (0.9%) Solution
4. What is the possibility of making this product in a ready to use form?