



AZA Wildlife Contraception Center

## MGA LIQUID

**Manufacturer** - ZooPharm division of Wildlife Pharmaceuticals, Colorado, USA.

**Product information** - MGA, a synthetic progestin dissolved in a special propylene glycol formulation for orally delivered contraception, is considered suitable for species in which orally delivered MGA has been shown to be safe and effective

**Safety to humans** - When used as directed, this product poses no health risk to humans. ZooPharm believes this MGA formulation is not a hazardous material according to the OSHA Hazard Communications Standard, 29 CFR 1910.1200 or the EPA Community Right-to-Know regulations. Therefore no Material Safety Data Sheets (MSDS) have been produced. If you have questions, call Dr. Bill Lance at 970-484-6267.

**Safety to treated animals** - MGA has been administered orally to domestic cattle for decades without untoward effects, which suggests that it should be generally safe for ruminants. However, exotic ruminants have not been treated orally with MGA for more than 10 years, so possible longer term effects are unknown. Also, as with most drugs, species differences apply. In particular, MGA liquid **is not recommended for carnivores**, since synthetic progestins have been shown to be associated with deleterious effects in this group. It may not be appropriate for primates, as a higher concentration is necessary for efficacy. It may not be effective in suids or equids.

**Recommended doses** - The product comes as a solution of 1mg MGA/ml. The following daily MGA doses are recommended:

- 0.1 mg MGA/day/animal - for small mammals such as bats and rodents
- 0.5 mg MGA/day/animal - for ungulates up to about 800 lbs
- 1.0 mg MGA/day/animal - for ungulates larger than 800 lbs, except giraffe and hippopotamus.
- 2.0-3.0 mg MGA/day/animal- for giraffe and hippopotamus

**NOTE: If the full dose is not consumed every day, the female should be separated from males, since follicle growth and ovulation may occur.**

**Administration** - MGA liquid can be added to a treat and delivered to individual animals, can be delivered directly into the mouth of animals such as hippos, or can be added to the regular diet and fed individually or to groups. However, it is important to insure that each female ingests at least the minimum effective dose every day or ovulation and pregnancy can result. If a female refuses to consume the dose, she should be separated from males until she has consumed the proper dose again for at least one week.

Although progestin contraception can often be effective even when ovulation is not blocked, to ensure efficacy we recommend that the dose be sufficiently high to suppress estrous behavior. Please report observations of estrous behavior in treated animals to Sally Boutelle (contact info below) to discuss a higher dosage.

**Latency to effectiveness** - As with MGA implants and feed, separation or alternative contraception should be used for 1-2 weeks after initiation of the product.

**Estrous cycles during contraceptive treatment** - Synthetic progestins may effect contraception by blocking ovulation, causing thickening of cervical mucus, slowing ovum transport, and/or interfering with fertilization or implantation. However, follicle growth may continue and sometimes be accompanied by estrogen production sufficient to cause estrous behavior. Ovulation may occur even though pregnancy does not ensue. Higher progestin doses may be preferred, so that estrous behavior is prevented, but may not be effective in completely suppressing follicle growth and all estradiol production.

**Duration of efficacy and reversibility** - Duration of efficacy may not be much more than one day, so the product must be administered daily. Following cessation of treatment, rapid clearance can result in ovulation within a few days, but actual latency to conception will vary by individual.

**Use during pregnancy** - Progestins are not recommended in pregnant animals because of the possibility of prolonged gestation, stillbirth, abortion, etc. in some species, although the effect may depend on dose. Progestins in late pregnancy seem not to interfere with parturition in primates, but this is probably a taxon-specific phenomenon.

**Use during lactation** - Progestins are sometimes prescribed for lactating women and are considered generally safe for nursing infants.

**Use in pre-pubertals or juveniles** - Future reproduction was not affected in calves of domestic cows on MGA-treated feed, but no studies of pre-pubertal treatment with MGA or other progestins have been conducted with other species, so possible long-term effects on fertility are not known.

**Precautions** – Progestins likely cause weight gain in all species. Possible deleterious effects on uterine and mammary tissues vary greatly by species; see cautions for each taxon.

**Consideration for seasonal breeders** - Treatment should begin at least one month before the anticipated onset of the breeding season.

**Reporting requirements** - All institutions using MGA liquid must submit a complete [Contraception Center Survey](#) to the AZA Wildlife Contraception Center. ***The product will no longer be sold to any institution that fails to submit the annual survey.***

**Request for purchase** - Before placing your first order with Zoopharm, or to add species to an existing order, ***you must register with the AZA Wildlife Contraception***

**Center.** The Center will then notify ZooPharm that you are an approved buyer so you will be able to make the purchase through a valid prescription faxed to ZooPharm at 307-721-3801. The formulation is compounded to a 1mg/ml strength in a 30 ml vial, at a price of \$25.00 plus shipping and handling. A more dilute strength can be provided on request for smaller mammals. Cost of special flavorings would be extra but should be minimal. Please submit the [MGA Liquid Registration Form](#) to:

Sally Boutelle, Program Coordinator  
AZA Wildlife Contraception Center  
Saint Louis Zoo  
1 Government Drive  
St. Louis, MO 63110  
314-646-4595; fax: 314-646-5534  
[Contraception@stlzoo.org](mailto:Contraception@stlzoo.org)