

## Propylene Glycol, ketosis treatment

### ITEM A

Synthetic substances allowed for use in organic livestock production

### ITEM B

1. The substance's common name.

Propylene Glycol. Common trade names include

3. The intended or current use of the substance such as use as a pesticide, animal feed additive, processing aid, nonagricultural ingredient, sanitizer or disinfectant.

Livestock medical treatment.

4. A list of the crop, livestock or handling activities for which the substance will be used. If used for crops or livestock, the substance's rate and method of application must be described. If used for handling (including processing), the substance's mode of action must be described.

Used as a drench for the treatment of ketosis in ruminants. Used on a per-cow basis when they are ketotic, which is not an uncommon condition in fresh cows that are in negative energy balance due to calving problems, etc

8. The Chemical Abstract Service (CAS) number or other product numbers of the substance and labels of products that contains the petitioned substance.

CAS # 57-55-6

12. A "Petition Justification Statement" which provides justification for one of the following actions requested in the petition:

Ketosis in Bovines is a fairly common occurrence resulting from nutrition imbalance. Propylene glycol provides the rumen the precursors for the animal to create its own glucose, due to its fate in the rumen environment. An alternative, albeit a temporary band-aid type fix and one that acts directly on the bloodstream's glucose level is intravenous dextrose or glucose (allowed). propylene is an essential follow-up to dextrose i.v. in a ketotic animal. Using propylene glycol may be thought of as adding wood to the woodstove.

Dextrose given I.V. every 8-12 hours would be an alternative. Sometime in refractory ketosis, insulin is given to inhibit the hormone sensitive lipase. hormone sensitive lipase cleaves the animal's own fat and sends it to the liver which converts it to ketones. Thus inhibiting it can be a good thing, however it is a rare thing to give insulin to a cow.