

Epinephrine, a hormone

ITEM A

Synthetic substances allowed for use in organic livestock production

ITEM B

1. The substance's common name.

Epinephrine, also known as Adrenaline

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.

Indicated in response to anaphylactic reactions brought on by injections or bee stings. Also used for bronchodilation, mydriasis, hemostasis, hypotension and cardiac arrest.

1 mL of 1:1,000 solution per 100 lbs of body weight injected subcutaneously or intramuscularly. Intravenous injection is not recommended for routine clinical work but may be desired in emergency situations. When injected intravenously, the dosages should be one quarter to one half the intramuscular dose.

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

CAS # 51-43-4

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

Epinephrine has been identified as a high priority livestock medication for the treatment of various livestock. No comparable nonsynthetic substance can provide sufficient therapeutic benefit and no alternative cultural practice can preclude occasional circumstances warranting treatment with this material.

Synthesized biologically Epinephrine is identical to the naturally occurring hormone and is indispensable for the rare treatment to an animal in anaphylactic shock which untreated could EASILY result in death. With a half-life of 30 seconds there are no lingering effects to an organic animal.