

**ENGAIN 9- ractopamine hydrochloride powder**  
**Zoetis Inc.**

-----  
**Engain™ 9**

Engain™ 9

(ractopamine hydrochloride Type A medicated article)

For Use in Finishing Swine Feeds Only

**Net Weight 25 lbs (11.34 kg)**

Do not feed undiluted.

**Active Drug Ingredient:** ractopamine hydrochloride – 9 g per lb (20 g per kg)

**Important:** Must be thoroughly mixed into feeds before use. Follow label directions.

**Indication:** For increased rate of weight gain, improved feed efficiency and increased carcass leanness in finishing swine, weighing not less than 150 lbs, fed a complete ration containing at least 16% crude protein for the last 45 to 90 lbs of gain prior to slaughter.

<b>Appropriate Concentration of Ractopamine in Type C Medicated Feed</b>
--------------------------------------------------------------------------

4.5 to 9.0 g/ton\*  
(5 to 10 ppm)

\*No increased benefit has been shown when ractopamine concentrations in the diet are greater than 4.5 g/ton (5 ppm).

**Inert Ingredients:** Ground corncobs.

Variable	Last 45 lbs of body weight gain		Last 90 lbs of body weight gain	
	4.5 g/ton ractopamine	9.0 g/ton ractopamine	4.5 g/ton ractopamine	9.0 g/ton ractopamine
Carcass Fat	↓ <sup>a</sup>	↓ <sup>a</sup>	↓	↓
10th Rib Backfat (3/4 location)	NC	NC	NC	↓
Last Rib Backfat (midline)	NC	NC	NC	NC
Loin Eye Area (10th Rib)	↑ <sup>a</sup>	↑	↑	↑
Rate of Lean Gain	↑	↑	↑	↑
Efficiency of Lean Gain	↑	↑	↑	↑
Dressing Percentage	NC	↑	↑	↑

NC= No Change, ↑ = increased, ↓ = decreased,

<sup>a</sup> Improvement was observed only in pigs weighing less than 250 lbs.

**Mixing Directions:** Thoroughly mix Engain 9 Type A Medicated Article into one ton of appropriate feed ingredients according to the table below to obtain the proper concentration in the Type B Medicated Feed (maximum 4920 g/ton).

The following table gives examples of how some Type B Medicated Feed concentrations can be prepared:

Pounds of Engain 9 to Add per Ton To Make a Type B Medicated Feed	Resulting Ractopamine Concentration in Type B Medicated Feed	
	grams/ton	grams/pound
100	900	0.45
200	1,800	0.90
300	2,700	1.35
400	3,600	1.80

Thoroughly mix Engain 9 Type A Medicated Article into one ton of complete swine feed according to the table below to obtain the proper concentration in the Type C Medicated Feed. Prepare an intermediate pre-blend of the premix prior to mixing in a complete feed. Thoroughly mix the required amount in a convenient quantity of feed ingredients, then add to the remaining feed ingredients to make a ton of complete feed.

Pounds of Engain 9 to Add per Ton To Make a Type C Medicated Feed	Resulting Ractopamine Concentration in Type C Medicated Feed
0.5	4.5 grams/ton (5 ppm)
1.0	9 grams/ton (10 ppm)

**Feeding Directions:** Feed continuously as the sole ration to finishing swine weighing not less than 150 lbs for the last 45 to 90 lbs (group average) of weight gain prior to slaughter.

#### CAUTION

Ractopamine may increase the number of injured and/or fatigued pigs during marketing. Not for use in breeding swine.

#### NOT FOR HUMAN USE

#### WARNING

The active ingredient in Engain, ractopamine hydrochloride, is a beta-adrenergic agonist. Individuals with cardiovascular disease should exercise special caution to avoid exposure. Not for use in humans. Keep out of the reach of children. The Engain formulation (Type A Medicated Article) poses a low dust potential under usual conditions of handling and mixing. When mixing and handling Engain, use protective clothing, impervious gloves, protective eye wear, and a NIOSH-approved dust mask. Operators should wash thoroughly with soap and water after handling. If accidental eye contact occurs, immediately rinse eyes thoroughly with water. If irritation persists, seek medical attention. The material safety data sheet contains more detailed occupational safety information. To report adverse effects, access medical information, or obtain additional product information, call 1-888-963-8471.

Store below 25°C (77°F), excursions permitted to 40°C (104°F). Avoid Moisture.

Expiration Date and Lot Number are printed on the bag. Not to be used after the expiry date.

**Restricted Drug (California) – Use Only as Directed** – Approved by FDA under ANADA # 200-542

Distributed by:

Zoetis Inc.

Kalamazoo, MI 49007



**Active Ingredient/Active Moiety**

Ingredient Name	Basis of Strength	Strength
RACTOPAMINE HYDROCHLORIDE (UNII: 309G9J93TP) (RACTOPAMINE - UNII:57370OZ3P1)	RACTOPAMINE HYDROCHLORIDE	20 g in 1 kg

**Packaging**

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:54771-8727-1	11.34 kg in 1 BAG		

**Marketing Information**

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANADA	ANADA200542	07/16/2013	

**Labeler** - Zoetis Inc. (828851555)

Revised: 6/2020

Zoetis Inc.