

**ACTOGAIN- ractopamine hydrochloride powder**  
**Zoetis Inc.**

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**Actogain™ 45**

Actogain™ 45

(ractopamine hydrochloride Type A medicated article)

**For Use in Feeds For Cattle Fed in Confinement for Slaughter Only**

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

Do not Feed Undiluted

**Active Drug Ingredient:**Ractopamine hydrochloride - 45.4 g per lb (100 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 **Complete** carcass leanness in cattle fed in confinement for slaughter during the last **Feed:** 28 to 42 days on feed.

**Top Dress** For increased rate of weight gain and improved feed efficiency in cattle fed **Feed:** in confinement for slaughter during the last 28 to 42 days on feed.

**Note:** Carcass leanness effects are not an approved indication for use when feeding ractopamine by Top Dress Feeding methods.

**Complete Feed**

<b>Indications</b>	<b>Appropriate Concentration of Ractopamine in Type C Medicated Feed*</b>	<b>Ractopamine (mg/hd/d)</b>
Increased Rate of Weight Gain, and Improved Feed Efficiency	8.2 to 24.6 g/ton (9 to 27 ppm)	70-430
Increased Rate of Weight Gain, Improved Feed Efficiency, and Increased Carcass Leanness	9.8 to 24.6 g/ton (11 to 27 ppm)	90-430

\* Based on 90% Dry Matter Basis

<b>Carcass Measurements</b>	<b>Effect of Ractopaminea</b>		
	<b>8.2 grams/ton (9 ppm)</b>	<b>16.4 grams/ton (18 ppm)</b>	<b>24.6 grams/ton (27 ppm)</b>
Hot Carcass Weight, lbs	↑	↑	↑
Dressing Percentage, %	NC	↑ <b>b</b>	↑ <b>b</b>
Carcass Percent Fat, %	NC	↓	↓
12th Rib Fat Thickness, in.	NC	NC	NC
Average Rib Eye Area, sq. in.	↑	↑	↑

USDA Yield Grade	NC	NC	↓ <sup>c</sup>
Marbling Score	NC	NC	NC
Rate of Carcass Lean Gain per Day	NC	↑	↑
Efficiency of Carcass Lean Gain per Day	NC	↑	↑

<sup>a</sup> The effect of ractopamine on parameters listed in this table is supported by data generated at the doses tested in the clinical field efficacy trials.

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

<sup>b</sup> Steers Only

<sup>c</sup> Reduction indicates an improvement in USDA Yield Grade.

## Top Dress Feed

Indications	Appropriate Concentration of Ractopamine in Type C Medicated Feeds	Ractopamine (mg/hd/d)
Increased Rate of Weight Gain and Improved Feed Efficiency	Appropriate Concentration of Ractopamine in a minimum of 1.0 lb <b>Top Dressed</b> Type C Medicated Feeds <sup>a</sup> (maximum of 800 g/ton)	70-400

<sup>a</sup>Based on 90% Dry Matter Basis

**Inert Ingredients:** Ground corncobs.

## Mixing Directions (Complete Feed)

Thoroughly mix Actogain 45 Type A Medicated Article in a ton of appropriate feed ingredients or diluents according to the table below to obtain the proper concentration in the Type B Medicated Feed (maximum 4,920 g/ton). The following table gives examples of how some Type B Medicated Feed concentrations can be prepared:

Pounds of Actogain 45 <sup>a</sup> to Add per Ton To Make a Type B Medicated Feed	Resulting Ractopamine Concentration in Type B Medicated Feeds <sup>b</sup>	
	grams/ton	grams/pound
36.1	1,640	0.82
72.2	3,280	1.64
108.3	4,920	2.46

<sup>a</sup> Actogain 45 contains 45.4g ractopamine hydrochloride per pound

<sup>b</sup> Based on 90% Dry Matter Basis

Thoroughly mix Actogain 45 Type A Medicated Article in a ton of complete cattle 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 one ton of complete feed.

<b>Pounds of Actogain 45<sup>a</sup> to Add per Ton To Make a Type C Medicated Feed</b>	<b>Resulting Ractopamine Concentration in Type C Medicated Feed<sup>b</sup></b>	
	grams/ton	ppm
0.18	8.2	9
0.36	16.4	18
0.54	24.6	27

<sup>a</sup> Actogain 45 contains 45.4g ractopamine hydrochloride per pound

<sup>b</sup> Based on 90% Dry Matter Basis

### Mixing Directions (Liquid Type B Feeds)

Thoroughly mix Actogain 45 Type A Medicated Article in a ton of appropriate feed ingredients or diluents according to the table below to obtain the proper concentration in the Type B Medicated Feed (maximum 2300 g/ton).

Maintain supplement pH to 4.5 to 7.5. For stored liquid Type B medicated feeds containing ractopamine, recirculate immediately prior to use for not less than 10 minutes, moving not less than 1% of the tank contents per minute from the bottom of the tank to the top. Recirculate daily as described even when not in use.

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

<b>Pounds of Actogain 45<sup>a</sup> to Add per Ton To Make a Liquid Type B Medicated Feed</b>	<b>Resulting Ractopamine Concentration in Liquid Type B Medicated Feed</b>	
	<b>grams/ton</b>	<b>grams/pound</b>
36.1	1,640	0.82
44.1	2,000	1.00
50.7	2,300	1.15

<sup>a</sup> Actogain 45 contains 45.4g ractopamine hydrochloride per pound

### Mixing Directions for preparing Type C Medicated Top Dress Feed

Thoroughly mix Actogain 45 Type A Medicated Article in a ton of appropriate feed ingredients or diluents according to the table below to obtain the proper concentration in the Type C Medicated Feed (maximum 800 g/ton). The following table gives examples of how some Type C Medicated Top Dress Feed concentrations can be prepared:

<b>Pounds of Actogain 45<sup>a</sup> to Add per Ton To Make a Type C Medicated Top Dress Feed</b>	<b>Resulting Ractopamine Concentration in Type C Medicated Top Dress Feed<sup>b</sup></b>		
	<b>grams/ton</b>	<b>grams/pound</b>	<b>mg/pound</b>
<b>Top Dress</b>			

2.20	100	0.05	50
4.41	200	0.10	100
6.61	300	0.15	150
8.81	400	0.20	200
17.62	800	0.40	400

<sup>a</sup> Actogain 45 contains 45.4g ractopamine hydrochloride per pound

<sup>b</sup> Based on 90% Dry Matter Basis

**Directions for Use (Complete Feed):** Feed continuously to cattle fed in confinement for slaughter as the sole ration for the last 28 to 42 days on feed.

**Directions for Use (Type C Medicated Top Dress Feed):** Feed continuously to cattle fed in confinement for slaughter a Type C Medicated Feed containing up to a maximum of 800 g/ton ractopamine (see mixing direction table) to provide 70 to 400 mg per head per day for the last 28 to 42 days on feed. Type C Medicated Top Dress feed must be fed in a minimum of 1.0 lb per head per day to provide 70 to 400 mg per head per day.

## CAUTION

Not for animals intended for breeding.

## NOT FOR HUMAN USE

## Withdrawal Period:

No withdrawal period is required when used according to labeling.

## WARNING

**WARNING:** The active ingredient in Actogain, 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 Actogain 45 formulation (Type A Medicated Article) poses a low dust potential under usual conditions of handling and mixing. When mixing and handling Actogain, 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 # 200-548

Distributed by:  
Zoetis Inc.  
Kalamazoo, MI 49007

To report suspected adverse events, for technical assistance or obtain a copy of the Safety Data Sheet, contact Zoetis Inc. at 1-888-963-8471. For additional information about adverse experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or <http://www.fda.gov/reportanimalae>.

51032502



**PRINCIPAL DISPLAY PANEL - 11.34 kg Bag**

51032502

For Use in Feeds For Cattle Fed in Confinement for Slaughter Only

# Actogain<sup>®</sup> 45

(ractopamine hydrochloride Type A medicated article)

Net Weight 25 lb (11.34 kg)

### Direct Feed Additive

**Indications:** Actogain<sup>®</sup> 45 medicated article is a Type A medicated article used in the feed of cattle to improve feed efficiency and increase carcass lean to fat ratio in confinement for slaughter during the last 60 to 90 days on feed.

Indication	Appropriate Concentration of Ractopamine in Type C Medicated Feed <sup>1</sup>	Ractopamine (mg/ton) <sup>2</sup>
Increased Rate of Weight Gain and Improved Feed Efficiency	0.3 to 0.6 g/ton (3 to 6 ppm)	70-130
Increased Rate of Weight Gain, Improved Feed Efficiency, and Increased Carcass Leanness	0.6 to 20.0 g/ton (6 to 20 ppm)	130-430

Characteristic	0.3 g/ton (3 ppm)	0.6 g/ton (6 ppm)	20.0 g/ton (20 ppm)
Net Carcass Weight, lb	0	0	0
Drainage Percentage, %	NC	0	0
Carcass Percent Fat, %	NC	0	0
15th Rib Fat Thickness, in	NC	NC	NC
Drainage 15th Rib Area, sq. in.	0	0	0
USDA Yield Grade	NC	NC	0 <sup>3</sup>
Shrinkage Losses	NC	NC	NC
Rate of Carcass Lean Gain per Day	NC	0	0
Percentage of Carcass Lean Gain per Day	NC	0	0

<sup>1</sup> The 0.3 to 0.6 g/ton concentration of ractopamine in the feed is supported by data generated at the sites listed in the direct feed additive label.

<sup>2</sup> 100 mg = 0.0001 g.

<sup>3</sup> Includes includes an improvement in USDA Yield Grade.

### Use in Feeds

Indication	Appropriate Concentration of Ractopamine in Type C Medicated Feed <sup>1</sup>	Ractopamine (mg/ton) <sup>2</sup>
Increased Rate of Weight Gain and Improved Feed Efficiency	Appropriate Concentration of Ractopamine at a maximum of 0.6 g/ton (6 ppm) in Type C Medicated Feed <sup>1</sup>	NC-130

<sup>1</sup> See label for details.

<sup>2</sup> See label for details.

<sup>3</sup> See label for details.

<sup>4</sup> See label for details.

<sup>5</sup> See label for details.

<sup>6</sup> See label for details.

<sup>7</sup> See label for details.

<sup>8</sup> See label for details.

<sup>9</sup> See label for details.

<sup>10</sup> See label for details.

<sup>11</sup> See label for details.

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<sup>65</sup> See label for details.

## ACTOGAIN

ractopamine hydrochloride powder

### Product Information

<b>Product Type</b>	OTC TYPE A MEDICATED ARTICLE ANIMAL DRUG	<b>Item Code (Source)</b>	NDC:54771-8728
<b>Route of Administration</b>	ORAL		

### Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
RACTOPAMINE HYDROCHLORIDE (UNII: 309G9J93TP) (RACTOPAMINE -	RACTOPAMINE	100 g



UNII:573700Z3P1)

HYDROCHLORIDE

in 1 kg

**Inactive Ingredients**

Ingredient Name	Strength
<b>WATER</b> (UNII: 059QF0KO0R)	
<b>SOYBEAN OIL</b> (UNII: 241ATL177A)	

**Packaging**

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:54771-8728-1	11.34 kg in 1 BAG		

**Marketing Information**

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANADA	ANADA200548	07/18/2013	

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

Revised: 12/2023

Zoetis Inc.