

## EXCENEL® RTU EZ (ceftiofur hydrochloride) Sterile Suspension



For intramuscular injection in swine.  
For intramuscular and subcutaneous  
injection in cattle. This product may be  
used in lactating dairy cattle. Not for  
use in calves to be processed for veal.

**CAUTION:** Federal (USA) law restricts this  
drug to use by or on the order of a licensed  
veterinarian.

### INDICATIONS

**Swine:** EXCENEL RTU EZ Sterile Suspension is indicated  
for treatment/control of swine bacterial respiratory disease  
(swine bacterial pneumonia) associated with *Actinobacillus*  
*pleuropneumoniae*, *Pasteurella multocida*, *Salmonella*  
*Choleraesuis* and *Streptococcus suis*.

**Cattle:** EXCENEL RTU EZ Sterile Suspension is indicated for  
treatment of the following bacterial diseases:

- Bovine respiratory disease (BRD, shipping fever,  
pneumonia) associated with *Mannheimia haemolytica*,  
*Pasteurella multocida* and *Histophilus somni*.
- Acute bovine interdigital necrobacillosis (foot rot,  
pododermatitis) associated with *Fusobacterium necrophorum*  
and *Bacteroides melaninogenicus*.
- Acute metritis (0 to 14 days post-partum) associated with  
bacterial organisms susceptible to ceftiofur.

### DOSAGE AND ADMINISTRATION

Shake well before using.

**Swine:** Administer intramuscularly at a dosage of 1.96 to  
2.27 mg ceftiofur equivalents (CE)/lb (3 to 5 mg CE/kg) body  
weight (BW) (1 mL of sterile suspension per 22 to 37 lb BW).  
Treatment should be repeated at 24-hour intervals for a total  
of three consecutive days. Do not inject more than 5 mL per  
injection site.

### Cattle:

— For bovine respiratory disease and acute bovine interdigital  
necrobacillosis: administer by intramuscular or subcutaneous  
administration at the dosage of 0.5 to 1 mg CE/lb (1.1 to  
2.2 mg CE/kg) BW (1 to 2 mL sterile suspension per 100 lb  
BW). Administer daily at 24-hour intervals for a total of three  
consecutive days. Additional treatments may be administered  
on Days 4 and 5 for animals which do not show a satisfactory  
response (not recovered) after the initial three treatments.  
In addition, for BRD only, administer intramuscularly or  
subcutaneously 1 mg CE/lb (2.2 mg CE/kg) BW every other day  
on Days 1 and 3 (48-hour interval). Do not inject more than 15  
mL per injection site.

Selection of dosage level (0.5 to 1 mg CE/lb) and regimen/  
duration (daily or every other day for BRD only) should be  
based on an assessment of the severity of disease, pathogen  
susceptibility and clinical response.

— For acute post-partum metritis: administer by intramuscular  
or subcutaneous administration at the dosage of 1 mg CE/lb  
(2.2 mg CE/kg) BW (2 mL sterile suspension per 100 lb BW).  
Administer at 24-hour intervals for five consecutive days. Do  
not inject more than 15 mL per injection site.

### CONTRAINDICATIONS

As with all drugs, the use of EXCENEL RTU EZ Sterile  
Suspension is contraindicated in animals previously found to  
be hypersensitive to the drug.

### WARNINGS

**NOT FOR HUMAN USE. KEEP OUT OF REACH OF  
CHILDREN.**

Penicillins and cephalosporins can cause allergic  
reactions in sensitized individuals. Topical exposures to such  
antimicrobials, including ceftiofur, may elicit mild to severe  
allergic reactions in some individuals. Repeated or prolonged  
exposure may lead to sensitization. Avoid direct contact of the  
product with the skin, eyes, mouth and clothing.

Persons with a known hypersensitivity to penicillin or  
cephalosporins should avoid exposure to this product.

In case of accidental eye exposure, flush with water for 15  
minutes. In case of accidental skin exposure, wash with soap  
and water. Remove contaminated clothing. If allergic reaction  
occurs (e.g., skin rash, hives, difficult breathing), seek medical  
attention.

The material safety data sheet contains more detailed  
occupational safety information. To obtain a material safety  
data sheet (MSDS) or to report any adverse event please call  
1-888-963-8471.

For additional information about adverse drug experience  
reporting for animal drugs, contact FDA at 1-888-FDA-VETS or  
online at <http://www.fda.gov/AnimalVeterinary/SafetyHealth>.

### RESIDUE WARNINGS:

**Swine:** When used according to label indications,  
dosage and route of administration, treated swine  
must not be slaughtered for 4 days following  
the last treatment. Use of dosages in excess  
of those indicated or by unapproved routes of  
administration may result in illegal residues in  
edible tissues.

**Cattle:** When used according to label indications,  
dosage and route of administration, treated cattle  
must not be slaughtered for 4 days following the  
last treatment. When used according to label  
indications, dosage and route of administration, a  
milk discard time is not required. Uses of dosages  
in excess of those indicated or by unapproved  
routes of administration, such as intramammary,  
may result in illegal residues in edible tissues  
and/or milk. A withdrawal period has not been  
established in pre-ruminating calves. Do not use  
in calves to be processed for veal.

### PRECAUTIONS

The effects of ceftiofur on cattle and swine reproductive  
performance, pregnancy and lactation have not been  
determined.

Intramuscular and subcutaneous injection in cattle and  
intramuscular injection in swine can cause a transient local  
tissue reaction that may result in trim loss of edible tissue at  
slaughter.

### STORAGE CONDITIONS

Store at controlled room temperature 20° to 25°C (68° to 77°F);  
excursions permitted 15° to 40°C (59° to 104°F). Protect from  
freezing. Shake well before using. Contents should be used  
within 14 days after the first dose is removed.

### HOW SUPPLIED

EXCENEL RTU EZ Sterile Suspension is available in 100 mL  
and 250 mL vials.

zoetis

Distributed by:  
Zoetis Inc.  
Kalamazoo, MI 49007

NADA 141-288,  
Approved by FDA

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# What the forage challenges of 2012 and 2013 taught us

Steve Massie for *Progressive Dairyman*

The 2013 weather continued the forage woes of U.S. dairy producers. The late-March warm-up in the upper Midwest, followed by freezing rain and then a major cold snap in early April, led to winterkill of alfalfa and ryegrass across large sections of central Iowa, through southern Minnesota, central Wisconsin and into central Michigan. This area represents nearly 20 percent of the U.S. dairy cow numbers. Several areas in Pennsylvania and New York also experienced small pockets of winterkill of alfalfa in key dairy areas. This weather severely decreased the acres available for first-cutting hayages and lowered first-cutting yields.

Then this same area was inundated with rain through the spring months, resulting in delayed harvest and poorer-quality hayages. To add further insult to injury, these regions had a cold snap at the end of July, virtually stopping the growth of the next cutting. I had a central Wisconsin dairyman tell me the temperature was 38°F on Sunday, July 28, and they could not find enough clothes in the parlor that morning to keep warm. Tonnage suffered yet again following this cold snap. Increased overseas forage exports from California, Washington, Oregon, Kansas and Nebraska continued to cut into current U.S. forage inventories. All of these factors resulted in 2013 forage shortages and kept the price and demand for dairy-quality hay at 2012 levels.

However, all is not lost. The extremely mild fall that followed allowed producers to get an additional cutting of hay that they had not planned on with the late start to the

season. Those who planted a summer forage (such as sorghum-sudan or teff grass) were able to take an additional cutting well into the late fall, adding extra tonnage to their inventories. The mild fall also allowed many dairy producers to plant winter small-grain forage for early spring harvest that will add to their forage inventories. These high-quality, highly digestible forages continue to make inroads into U.S. dairy diets and cut energy cost in rations. Many producers are considering planting spring forages (oats and barley) to add to forage inventories if they can find seed in a very tight seed market.

### Then there are two corn silages

The 2013 corn silage harvest saw a tale of two fields. Those acreages that were late-planted saw decreased tonnage (20 to 24 tons as-fed), proper moisture, increased fiber digestion (4 to 5 points better than 2012), starch values close to last year's drought-stressed corn silages and better starch digestion rates (80 to 85 percent on seven-hour IVSD) than last year. The tonnage drag on the later-planted corn following the wet spring will hurt many farms' total forage inventory and force dairy producers to sell cows, buy expensive hay or plant an early harvested forage.

While the quantity is not there, quality is. This corn silage is very good nutritionally, with above-average fiber (NDFD) and starch digestibility, and should allow for excellent milk production. Much of this corn silage was put up at excellent moistures, resulting in good packing densities, which will lower the risk of yeast and molds forming while in storage.

Because of the late fall, this corn



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silage had time to grow tall but lacked ear fill. This resulted in the fodder diluting down the starch content of the forage with lower starch values than producers wanted (and very similar to 2012's shortened plant with small-ear, drought-stressed corn silage). I had many producers disappointed in their 22 to 25 percent starch corn silage when they saw the green fields as compared to the previous year.

I quickly reminded them that we plant corn silage for forage, and if we really wanted high-starch corn silage, we could simply leave 4 foot of it in the field and double the starch content. They quickly realize that leaving half of the tonnage in the field is not a sound economic decision and

From our family to yours – may you all have a very  
**Merry Christmas**

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“ Inventory shortages and poor digestion of both starch and fiber will make it another year with feeding difficulties. ”

figure they can buy a little energy to make up for the lower starch in the corn silage. Wise dairy producers.

**The other corn silage**

Then there are the other fields that were just slightly delayed getting the corn planted but got slapped by the weather in the fall. A warm front that marched across most of the U.S. in late August and early September 2013 hurt the U.S. dairy industry, not only with a major drop in milk production but also dried the standing corn at an alarming rate. Most U.S. dairy producers were chopping corn or just about to start when the furnace-like warm-front blast spiked temperatures, and its accompanying high winds sucked the moisture out of the corn plant at a 2 or 3 percent point drop per day. Suddenly corn that was ready was too dry, corn that dairy producers thought was a week or two away was ready now, and guys that were chopping wished they were done.

Much of this corn silage is on the drier side and at an increased risk for molds and yeast. I have not seen or heard of issues yet, but I am worried about this spring when the temperatures warm up and the excess trapped air in the drier corn silage will allow the yeast to start to grow. Yeast growth will raise the silage pH, allowing mold spores to grow. Certain molds will produce toxins as their defense mechanism and can be detrimental to cows. Plastic maintenance needs to be a high priority on this type of drier corn silage. Holes, rips and tears need to be repaired quickly to prevent this chain reaction from starting.

The drier corn silage also saw a drop in starch digestion. This is showing up on forage lab tests with lower seven-hour IVSD (in vitro starch digestibility), with increased starch in manure analyses, increased MUNs in the tank and overall less milk production. Adding a couple of pounds of pure corn starch, cookie meal, bakery byproducts, hominy, wheat or sugar will offset the slower starch digestion found in this drier corn silage.

As time goes along, the starch in the corn silage will become faster, and these faster-digesting feedstuffs may not be needed. The drier the corn silage is, the longer this time period will be. Fiber digestion in this drier corn silage is about what we saw with 2012's drought-stressed corn silages. A taller plant means more lignin to keep the plant upright. Lignin is indigestible but is part of NDF, so we saw lower NDFDs in 2013.

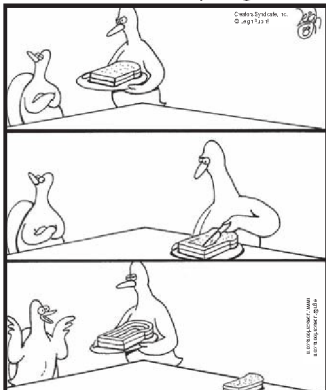
A taller plant also means higher tonnages, and most dairy producers

would agree that they saw great yields last fall with 25 to 32 tons per acre. This tremendously helps corn silage inventories that had been depleted from feeding higher-corn silage diets over the winter to stretch existing haylage inventories. Haylage inventories had to be stretched a month longer than expected with first-cutting delays. Corn silage inventories had to stretch a month longer than planned, with corn silage harvest delayed as a result of late corn planting. Dairies that traditionally had two or three months'

extra corn silage inventories were back to the days of counting tons and days on a calendar to be sure they did not run out of corn silage inventory.

The forage crop of 2013 will continue to bring challenges to dairy producers. Inventory shortages and poor digestion of both starch and fiber will make it another year with feeding difficulties. Dry corn silage could increase these challenges. A mild fall coupled with early spring forages could be the break dairy producers have been looking for. **PD**

**Rubes®** by Leigh Rubin



**EXCENEL RTU EZ**  
(ceftiofur hydrochloride)  
Sterile Suspension

**REFORMULATED TO COME OUT EASIER.**

Introducing EXCENEL RTU EZ (ceftiofur hydrochloride) Sterile Suspension. It provides the same effective treatment as EXCENEL RTU but it's easier to get out of the bottle, into a syringe and into your animals — and it has one of the shortest withdrawal times of any treatment in its class on the market today. With the Residue Free Guarantee<sup>™</sup> behind it, you won't have to worry about a residue violation when used according to the label. Talk to your veterinarian or visit [excenelrtuez.com](http://excenelrtuez.com) to learn more.

**RESIDUE FREE GUARANTEE**

Residue Free Guarantee: If you use a Zoetis-branded ceftiofur product according to label indications, and experience a violative ceftiofur milk or meat residue, Zoetis will compensate you for the best market value of the animal or purchase the tanker of milk at fair market value. You must purchase the product from a Zoetis-approved supplier, use the product according to label indications, have documentation of the product purchase and treatment records, and have conducted training on appropriate use to ensure proper dose and route of administration of the product. Extra-label use as prescribed by a veterinarian is excluded from the guarantee. If you experience a ceftiofur residue violation after following label indications and the above steps, contact Zoetis VMPS (Veterinary Medical Information and Product Support) at 800-366-5288 to report the situation.

**DAIRY WELLNESS MAKES A DIFFERENCE™**

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