

PROFESSIONAL PEST MANAGEMENT

ATTRACTIVE AT ANY ANGLE.

Technical Bulletin

FOR LIFE UNINTERRUPTED™

 **Talon® Ultrablok**
Rodenticide

syngenta®

TM

AN IMPROVEMENT IN RODENT CONTROL

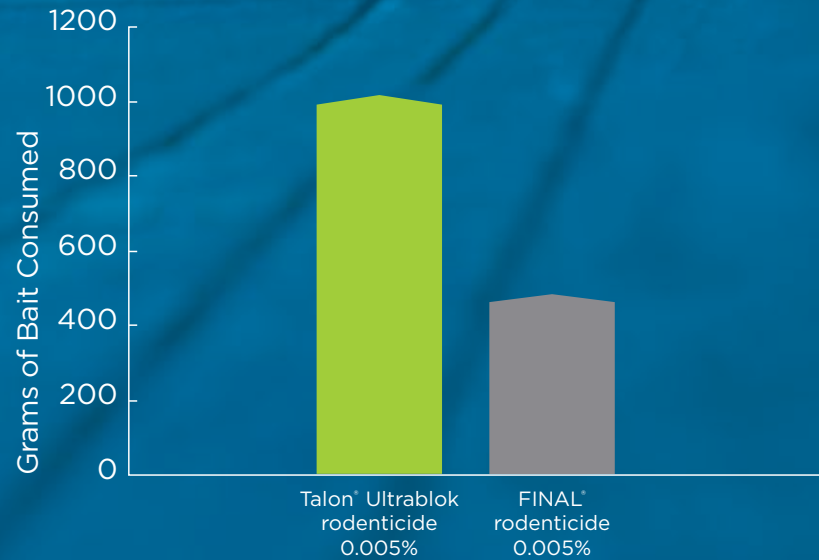
Rats and mice are capable of transporting harmful pathogens, which can negatively affect the lives of both people and pets. Talon® Ultrablok rodenticide from Syngenta Professional Pest Management uses advances in food science to improve the attractiveness and palatability of the bait, which results in improved bait consumption and prevents rodents from disrupting your customers' environments.

Designed to Enhance Attractiveness

It is important for a rodenticide bait block to achieve a balance between acceptance and durability. Because rats and mice are primarily grain feeders, Talon Ultrablok uses coarsely ground grain to encourage feeding, as well as unique ingredients that have been shown to improve acceptance of the bait. Each ingredient was selected using the latest developments in food science to create the most attractive *brodifacoum* block on the market.



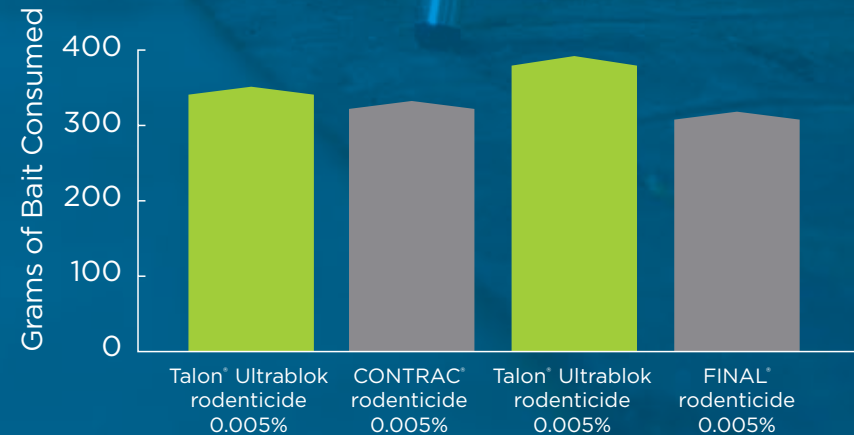
Bait Preferences of House Mice, Purdue University



This graph illustrates the bait preferences of house mice for Talon Ultrablok and FINAL® rodenticide during a field test at a commercial swine production facility. Following a 14-day pre-baiting period, mouse bait stations were baited with both Talon Ultrablok and FINAL in the same station. The positions of the bait blocks within each station were randomized, and bait consumption and tracking pad activity were measured for 14 days. Results showed consumption of Talon Ultrablok was found to be significantly higher than consumption of FINAL after 14 days.

Source: Purdue University, Grzesiek Buczkowski, Ph.D., CBR912A4-2013US, 2014
Trials reflect treatment rates and mixing partners commonly recommended in the marketplace.

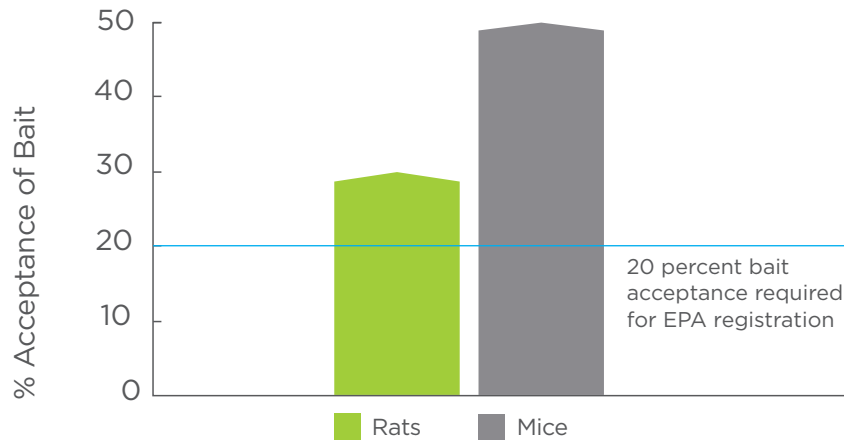
Bait Preference of House Mice, Sierra Research Laboratories



This graph illustrates the bait preferences of house mice for three rodenticides during a test at a wild fowl facility. Following a pre-baiting period, mouse bait stations were baited with Talon Ultrablok and CONTRAC® rodenticide, and then again with Talon Ultrablok and FINAL rodenticide. The positions of the bait blocks within each station were randomized, and bait consumption and tracking pad activity were measured. In this test, consumption of Talon Ultrablok was comparable to consumption of CONTRAC, while consumption of Talon Ultrablok was significantly higher than consumption of FINAL.

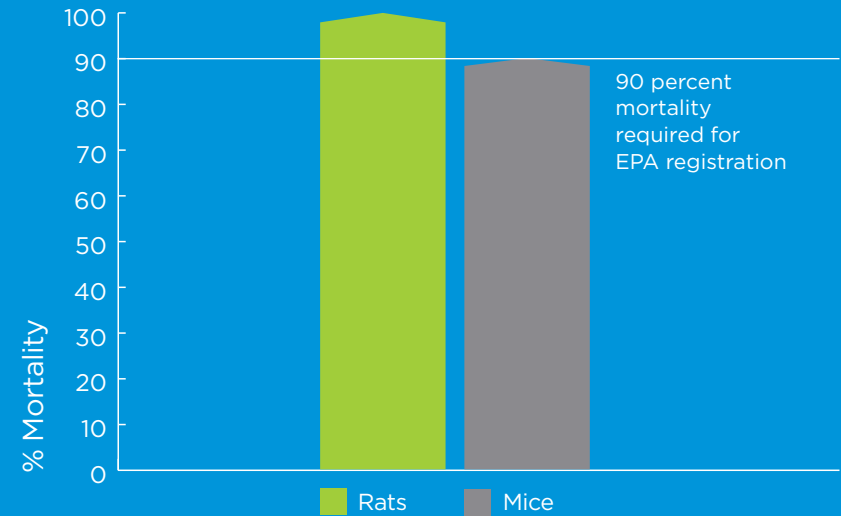
Source: Sierra Research Laboratories, Bill Donahue, Ph.D., CBR910A4-2014US, 2014
Trials reflect treatment rates and mixing partners commonly recommended in the marketplace.

Bait Acceptance Among Rats and Mice, University of Reading



These graphs illustrate the bait acceptance and mortality of Talon Ultrablok against both rats and mice. Over a four day test period in both trials, rats and mice were given a choice between Talon Ultrablok and a highly accepted standard EPA diet that contains of a mixture of grains and oil. Bait acceptance and mortality were measured against EPA standards for rodenticide bait registration - 20 percent required for bait acceptance and 90 percent required for mortality.

Mortality Among Rats and Mice, University of Reading



Both rats and mice demonstrated notable bait acceptance of Talon Ultrablok over the highly accepted standard EPA diet. The observed rates of mortality of rats and mice who had consumed Talon Ultrablok were 100 percent and 90 percent, respectively.

These results for bait acceptance and mortality both exceeded the standards for registration of rodenticide baits in the U.S. The results are also considered effective against European Union (EU) standards.

Source: University of Reading, Colin Prescott, Ph.D., VPU/13/019, 2013
Trials reflect treatment rates and mixing partners commonly recommended in the marketplace.



Active Ingredient Delivers Powerful Control

New rodenticide regulations require that above-ground placements of single feeding anticoagulant baits must be in tamper-resistant bait stations. However, rats consume eight times less bait when it is offered in a bait station than when it is presented in the open.¹

When feeding rates are low for this or other reasons, it is important to use the most effective active ingredient available to ensure single feeding control. The active ingredient in Talon Ultrablok, *brodifacoum*, is the most effective of the single-feeding anticoagulant rodenticides available in the U.S. pest control market. With an active ingredient percentage of 0.005%, a rat only needs to eat about 1.5 grams of Talon Ultrablok to receive a lethal dose. Additionally, there has never been a documented case of resistance to *brodifacoum*, while resistance to the other single feeding anticoagulant baits has been documented in both Europe and Asia.

Proven Efficacy in Difficult Environments

The toughest test for a bait block is how it holds up in wet environments. As an extruded wax block, Talon Ultrablok has an excellent combination of palatability and weatherability. A block of Talon Ultrablok submerged in water for 24 hours will not lose color or break down, even with the presence of large grain pieces. This makes the product ideal for challenging bait placements in damp environments.

In a trial, samples of Talon Ultrablok were placed in an environmental chamber at 70 degrees and suspended over a tray of water to create a high-humidity environment. After 28 days, mold growth was significantly less on Talon Ultrablok than on a similar rodenticide product tested.

¹ Effects of Tamper Resistant bait boxes on bait uptake by Norway Rats (*Rattus Norvegicus* Berk.); Alan P. Buckle and Colin V. Prescott; *International Journal of Pest Management* 57(1) 77-83 (March 2011)

A FAMILY OF RODENTICIDE CONTROL

In addition to Talon Ultrablok, Syngenta offers a family of rodenticide solutions to help you provide quick and effective control of tough rodent populations:

- ▶ Talon-G rodenticide: The mini-pellet formulation comes in an odor-releasing, moisture-resistant pack containing the bait, which is made of a high-quality grain base and is highly attractive to rodents, especially mice.
- ▶ Weatherblok®XT rodenticide: Designed to withstand harsh environmental conditions with weather-resistant wax blocks, which feature grooved edges for enhanced feeding.

 **Talon® Ultrablok**
Rodenticide

 **Talon® G**
Rodenticide

 **Weatherblok® XT**
Rodenticide

Packaging With You In Mind

The innovative packaging design for Talon Ultrablok features an easy-to-carry, 16 lb. package with side and top handles, which contains two fully labeled 8 lb. bags of product. Each 8 lb. bag is dual-walled and can be resealed, providing long-lasting bait freshness. Each bag can also be placed individually in service vehicles. Whether you run a small or large operation, the packaging for Talon Ultrablok can provide the ease, convenience and amount of product you need.

Relative Lethal Doses of Single Feeding Anticoagulant Rodenticides*

Rodenticide Active Ingredient	Rat LD50	Mouse LD50
<i>Brodifacoum</i>	0.4 mg/kg	0.4 mg/kg
<i>Difethialone</i>	0.5* mg/kg	0.5 mg/kg
<i>Bromadiolone</i>	0.7 mg/kg	1.8 mg/kg

*All difethialone baits in the U.S. are formulated at half the strength of brodifacoum baits (0.0025%).
Values obtained from Potential Risks of Nine Rodenticides to Birds and Nontarget Mammals:
A Comparative Approach; US EPA, Office of Prevention, Pesticides and Toxic Substances, 2004

Talon Ultrablok Profile

- ▶ Enhancements based on advances in food science make Talon Ultrablok the most attractive *brodifacoum* block on the market
- ▶ Proven performance of *brodifacoum*; superior efficacy with a low dosage of the active ingredient also helps reduce bait shyness
- ▶ Innovative packaging design provides convenience for PMPs, whether they run a small or large operation

FOR LIFE UNINTERRUPTED™



Effective Rodent Control For Your Business

Syngenta is committed to providing you with a broad portfolio of pest control products to help protect your customers and their valued assets. With its scientifically improved attractiveness and proven efficacy, Talon Ultrablok can help ensure your customers are living without the disruption of rodents.

To learn more about Talon Ultrablok, please visit www.SyngentaPMP.com/TalonUltrablok or call 1-866-SYNGENT(A) (796-4368).