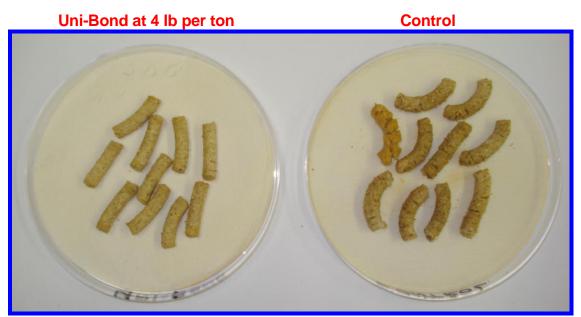


Feed Mill Processing • Nutrition

DO YOU NEED A MOISTURE REPELLENT BINDER?

Wild game pellets exposed in humidity chamber at 90°F and 85% humidity for 48 hours



CALL UNISCOPE FOR HELP!

Moisture Repellency • Binding • Anti-Bridging

Uni-Bond... your solution for moisture repellency!

There have been problems in the feed industry with moisture repellency and animal feeds. When certain feed types are exposed to humidity, rainfall or snowfall they can bridge, become soft, swell and eventually degrade into fines. Some of these feed types include pre mix pellets, urea pellets, wild game feeds, calf creep pellets, high fiber pellets and high fat pellets during summer.

Now, there is a unique pellet binder that can help manage these difficult quality problems.

Uni-Bond improves hardness, durability and moisture repellent properties of pellets, cubes or blocks. **Uni-Bond** is a low inclusion powdered pellet binder that is added at the mixing stage prior to pelleting.

Heat and moisture in the conditioning chamber liquefy and react with the binder creating a thin adhesive coating that solidifies into a water-resistant film upon cooling. **Uni-Bond** produces a water resistant feed that will be free flowing and last longer with less waste when exposed to the weather.

PRE MIX PELLETS IN TEXTURED OR "SWEET FEEDS"

A common feeding practice for certain beef, dairy, or horse feeds is to mix flaked grains (60-70%) with protein pellets (20-25%), and then add molasses (8-12%). With these feed types pellet stability can be a problem. Pellets become soft and break apart into fines in the bag or bin as they absorb moisture from molasses.

Uni-Bond is designed for use as a stability agent for pellets during the production process. **Uni-Bond** will increase pellet durability, but more importantly increase moisture resistance when combined with the balance of the feed ingredients and

molasses. The customer will be able to see the pre mix pellet in the textured feed.



HIGH UREA PELLETS

Uni-Bond can be used as an anti-bridging agent in pelleted feeds containing urea, an ingredient that is moisture and heat sensitive. During pelleting, the steam in the conditioning chamber liquefies urea. As the feed ingredients pass through the pellet die, the friction heat further liquefies urea.

Urea is also hygroscopic and continues to absorb moisture from the environment after pelleting, becoming sticky, causing pellet bridging in bins, bulk trucks and bags. **Uni-Bond** can be used as a production tool to reduce moisture absorption and improve the flow of urea pellets.

HIGH FAT PELLETS DURING SUMMER

High fat levels in horse feed cause problems with low pellet quality. In addition, high ambient temperatures compound the problem and pellets fall apart. **Uni-Bond**

can help as a low inclusion pellet binder to increase pellet quality and to hold the pellet together after production. **Uni-Bond** can limit fat from "weeping" out of the pellet.

CALF CREEP & HIGH FIBER PELLETS

Calf Creep feeds and pellets with high fiber are subject to swelling and pellet disintegration in high humidity conditions. **Uni-Bond** can repel moisture to help keep pellets free flowing and to maintain pellet integrity.



WILD GAME FEEDS

Weather stability is a problem with game Without added protection feed feeds. ingredients become soft and swell when exposed to humidity, rainfall, or snowfall. The result is degradation into fines occurring in both automatic feeders and ground feeding applications. Automatic feeders are filled with grain or pellets, and an automatic timer disperses the feed over an extended period. It is important that the pellets retain integrity and remain free flowing to ensure a constant delivery over extended time periods. For ground feeding, the soil and topical moisture breaks the feed apart creating waste.

A binding agent to improve pellet quality and weatherproofing is helpful for both feeding practices. Other binding agents composed of Lignin Sulfonate or Hemicellulose are hygroscopic and actually draw moisture into

the feed compounding the instability problem.

Uni-Bond is an excellent production aid to help solve these problems and ensure quality pellets.



REPLACES LIGNIN SULFONATE AT 1/3 THE INCLUSION

Lignin sulfonates are used as general purpose pellet binders with typical inclusion levels of 10-12.5 lb per ton. **Uni-Bond** is a low inclusion pellet binder that can be used

at one third the inclusion level or approximately 3-4 lb per ton with equal binding performance.

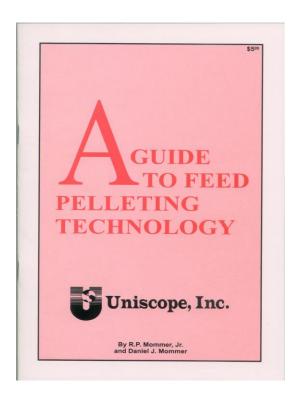
Uni-Bond...

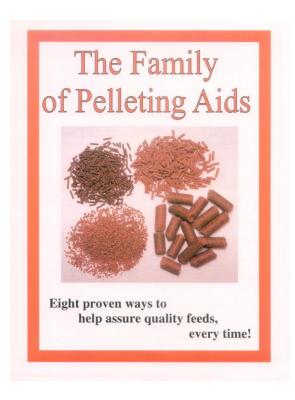
is available in 50 lb bags or 2,000 lb tote sacks

www.uniscope-inc.com

"Contact Uniscope to help take the headache out of pelleting feeds..."

- Product Technical Booklets
- Samples for Testing
- Trouble Shooting Assistance
- Product Line Brochure (binders, lubricants, anti bridging agents and water repellent minerals)









Uniscope, Inc.

310 South First Street Johnstown, Colorado 80534 USA Phone: (970) 587-4614

Fax: (970) 587-4372
Toll Free USA: 1-877-312-2161
<u>customerservice@uniscope-inc.com</u>
www.uniscope-inc.com