

# Is Your Cellulose Product An All Borate Formulation?

You shouldn't necessarily believe what's printed on the bag!

National Fiber uses an all borate formulation in our Cel-Pak insulation. Ammonium sulfate, a common ingredient in other cellulose insulations, is cheaper, but under the right conditions it can lead to problems with ammonia smells and even possible corrosion of any metal it comes in contact with.

## **\*Here's a quick and easy way to find out if your insulation contains any ammonium sulfate:**

- Put on your safety glasses and a pair of rubber gloves.
- Pour  $\frac{1}{2}$  to  $\frac{3}{4}$  cup of warm water into a suitable container (such as a measuring cup or coffee can).
- Add a good handful of cellulose. Stir or mix it so the cellulose is good and wet.
- Add a teaspoon of Drano granules (not the liquid, the dry product) and stir.
- Now give it the 'sniff test'. Do you smell ammonia? Then the product you just tested contains ammonium sulfate and is NOT an all borate formulation.

Obviously, this is a test. No one is going to add Drano to someone's walls or attic. In the real world, however, all it takes is the right combination of temperature, humidity and time to cause the ammonia outgassing – no Drano required!

In the test, the water simulates high humidity and the Drano is simply accelerating the outgassing of the ammonia that would take place under the right conditions in the insulated structure (without the presence of Drano).

**\*SAFETY NOTE:** Drano can cause burns and is very hazardous if ingested by humans or animals. It must not be left lying around, so properly dispose of the mixture as soon as you have completed the test, and properly rinse the container and any implements used. **National Fiber does NOT recommend this test be carried out by homeowners, around children or animals, or by anyone who is not used to, or is uncomfortable with, handling chemicals.**