

Message

From: ADAMS, STEPHEN A [AG/1000] [/O=MONSANTO/OU=NA-1000-01/CN=RECIPIENTS/CN=113797]
Sent: 6/11/2010 9:11:01 PM
To: HAUPFEAR, ERIC A [AG/1000] [eric.a.haupfear@monsanto.com]; HEYDENS, WILLIAM F [AG/1000] [william.f.heydens@monsanto.com]
Subject: RE: Question...

yeah, that's what I think... Bill forgot to hit the alt key! ... w ppm? what the heck?

Other than that, 1,4-dioxane was once included on the FAO specification with a limit of 1 ppm, but since this is an impurity in the ethoxylated surfactants and not in the glyphosate manufacturing process itself, the specification was later dropped from the FAO specification. The 1 ppm limit in the formulation was retained by Monsanto as a specification managed via the raw material specification since it was considered to be reasonably attainable and a level that was considered to be below any health risk level. However, it is my understanding that the Monsanto CSWG had later increased the level of 1,4-dioxane up to 10 ppm in final formulated products.

So, to answer your question, I believe that there is a Monsanto self-imposed spec for 1,4-dioxane in the final formulation that is managed by the surfactant specs. I believe that spec is now 10 ppm, but we might want to confirm that value with Erin or Donna Farmer, both of whom are not in today.

The other thing is that we have to be very careful before we go slinging mud about 1,4-dioxane in Chinese glyphosate in public, because whether it is 1 ppm or 10 ppm, we most likely have it on our products too, and the general public does not understand the difference between 1 ppm and a bucket full...if there is a chemical that is considered to be a cancer-causing, it don't matter how much is in there, just that it is in there!

Steve

-----Original Message-----

From: HAUPFEAR, ERIC A [AG/1000]
Sent: Friday, June 11, 2010 1:57 PM
To: HEYDENS, WILLIAM F [AG/1000]; ADAMS, STEPHEN A [AG/1000]
Subject: RE: Question...

Thanks Bill...in your note, I assume you meant "1" not "w" ppm? (you didn't hold onto that "alt" key long enough on your blackberry)

Steve: anything to add?

Thanks!

E

-----Original Message-----

From: HEYDENS, WILLIAM F [AG/1000]
Sent: Friday, June 11, 2010 12:58 PM
To: HAUPFEAR, ERIC A [AG/1000]; ADAMS, STEPHEN A [AG/1000]
Subject: Re: Question...

Eric,

A long time ago we self-imposed a w ppm spec on the surfactant, if I recall correctly. I don't think we ever changed it.

I am out office until next wed, but you can check with Steve Adams in the meantime.

Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: HAUPFEAR, ERIC A [AG/1000]
To: HEYDENS, WILLIAM F [AG/1000]
Sent: Thu Jun 10 12:30:40 2010
Subject: Question...

Hi Bill...what do you know about any "spec" we might have on 1,4-dioxane on our glyphosate formulations? (Is there a spec on the formulation or on the surfactant raw materials)??

We have seen some 1,4-dioxane in some of the Chinese samples...still trying to nail down our quantification...but wanted to see how those levels compare to what we might spec our product at.

Thanks!
E