

Re: Copper and ammonium carbonate

Source: <http://sci.tech-archive.net/Archive/sci.chem/2007-01/msg00081.html>

- *From:* Erlend Meyer <"mitt"."navn"@gmail.com>
 - *Date:* Fri, 05 Jan 2007 16:44:02 -0600
-

donald haarmann:

Hi'ya Don, nice to see a fellow pyro here.

Well you don't specify which copper carbonate you want

Doesn't really matter, but the higher the copper content the better.

and I don't know what Ullmans Dictionary is, however, I do have Ullmann's Encyclopedia,

That's the one, it must be more than 10 years since i had access to Ullmann's, damn what a nice set.

Ullmann (among others) sez to buy the obvious water soluble copper salt (Home Depot, &c.) and add to it the obvious water soluble carbonate to produce "light" copper carbonate.

Yup, "light" is part of the problem. Precipitated copper carbonate (or oxide for that matter) is a messy thing to handle, it is nearly impossible to filter and takes forever and a day to dry.

NB – The product(s) formed are condition (sol. con./temp) dependent.

Exactly. Without a method that produces a consistent composition it's not

Re: Copper and ammonium carbonate

really worth the effort. I was sure I read about copper leaching in Ullmanns, but it might have been one of the other huge technical shelf-fillers (we had'em all I think).

Copper in an excess of air dissolved in aq. sol. of ammonium carbonate yeilds something blue perhaps cupric diammino-carbonate ($\text{Cu}(\text{NH}_3)_2\text{CO}_3$). (Mellor's opus. 3:275)

I am leeching a batch in ammonia and ammonium carbonate now, and it sure is a pretty blue. Boiling produces black oxide that seems a lot more dense than the usual precipitation, so I guess I should be happy with what I've got.

Mellor devotes 14 pages to copper carbonate. If he only reported what was know for sure 1/2 a page would have done nicely.

That's my impression as well, a lot of maybes. I gave up understanding the finer points of copper chemistry a long time ago...

—

Erlend Meyer

When I am king you will be first against the wall

.