

Re: Can Gallium form amalgam-type alloys?

Source: <http://sci.tech-archive.net/Archive/sci.materials/2004-08/0144.html>

From: Angelo (*patrik56_at_libero.it*)

Date: 08/25/04

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Pittsburgh Pete wrote:

> *Angelo* wrote:

>> *Hi all,*

>>

>> *I'm wondering if molten Ga (m.p. ca. 30 oC) would dissolve*

>> *other metals, much like Hg does. And if so, which metals*

>> *have great, or at least appreciable, solubilities in liquid Ga.*

>> *I've the feeling that alkali metals will do, probably Al, Sc,*

>> *and perhaps Y, La, and Lanthanides, too. What about*

>> *the classical triad Cu, Ag, Au? Also, for Ge, Sn, and Pb.*

>>

>> *I did some searches, but found about nothing interesting.*

>> *Any direct info or links would be greatly appreciated.*

>>

>> *thank you for your attention,*

>> *Angelo*

>

> *Try searching Google under gallium amalgam.*

As said in my OP, I did, but found (a lot of) single cases, mainly concernig dentistry and failed to get a fully satisfying, coherent set of data in a chemistry oriented fashion. Perhaps it's my fault, for not bothering examine all the huge amount of refs. I'll retry ASAP.

> *You will find this four year old British Dental Journal article about some commercial dental products:*

>

> <http://www.nature.com/bdj/journal/v189/n6/pdf/4800755a.pdf>

>

> *Amalgams for fillings are medical products which means that a search of Public Medline can find lots of abstracts to magazine articles. Go to the Entrez site at:*

>

> <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>

>

> *and put in the key words gallium amalgam.*

> *There's even one review article titled Gamalgamation!*

sci.materials: Re: Can Gallium form amalgam-type alloys?

Oh, very good, indeed!

> *Click on "Related Articles" for even more references.*

>

>

>

> *Pittsburgh Pete*

Thanks Pete

Mark Thorson wrote [in a subsequent post]:

> *Look here. Gallium indeed forms amalgams with aluminum*

> *and other metals.*

<http://patft.uspto.gov/netahtml/search-adv.htm>

Thanks Mark

Best regards,
Angelo