

Law of reciprocal proportions, problem with NH₃ and N₂O Example...

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- *From:* ali.jan@xxxxxxxxxx
 - *Date:* 26 Sep 2005 09:36:57 -0700
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Hi,

A quick definition of Law of Reciprocal Proportions and an example:

"Law of Reciprocal Proportions: Richter gave this law in 1792. It states that the two weights of two or more different elements which separately combine with a definite weight of another element will be the same as, or simple multiples of the proportions of the weights of these different elements when they combine amongst themselves. Carbon and Hydrogen combine with oxygen separately to form two oxides- CO₂ and H₂O. In CO₂, 12 gms of Carbon combines with 32gms of Oxygen. In water, two gms of Hydrogen combines with 16gms of Oxygen. So here 12 gms of carbon and 4 gms of hydrogen combine with a definite weight 32 gms of oxygen. When carbon and hydrogen will combine with each other they must have a ratio of 12:4 or a simple multiple of this ratio and actually in methane CH₄ they have the same ratio which is according to this Law of Reciprocal Proportions." Source : <http://ed.augie.edu/~pdhungel/>

I fail to see how this example works with Ammonia(NH₃) and DiNitrogenOxide(N₂O).

NH₃ comes in the ratio 14:3 while N₂O comes in the ratio 14:8. With themselves, they make a ratio of 8:3. Now in case of water, the ratio between O and H is 8:1. 8:1 is neither a multiple nor the same as 8:3.

What am I doing wrong here? I am, I think, exactly following the above example of CO₂ and H₂O.

Kind Regards,

Ali

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- *Follow-Ups:*
 - ◆ **Re: Law of reciprocal proportions, problem with NH₃ and N₂O Example...**

Law of reciprocal proportions, problem with NH3 and N2O Example...

◇ *From:* Octa Ex

◆ ***Re: Law of reciprocal proportions, problem with NH3 and N2O Example...***

◇ *From:* Attila the Bum

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