

Correction

Indirect electrosynthesis of ammonia from nitrogen and water by a magnesium chloride cycle at atmospheric pressure

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In the originally published version of this article, Table 1 had duplicated reactions but was meant to demonstrate three different reactions: $\text{Mg}_3\text{N}_2(\text{s}) + 6\text{HCl}(\text{a})$, $\text{Mg}_3\text{N}_2(\text{s}) + 6\text{HCl}(\text{g})$, and $\text{Mg}_3\text{N}_2(\text{s}) + 6\text{NH}_4\text{Cl}(\text{s})$. The corrected table appears here and now with the article online.

The authors regret this error.

Table 1. Comparison of different processes for the NH_3 synthesis from Mg_3N_2 and HCl

Reactions	$\text{Mg}_3\text{N}_2(\text{s}) + 6\text{HCl}(\text{a})$	$\text{Mg}_3\text{N}_2(\text{s}) + 6\text{HCl}(\text{g})$	$\text{Mg}_3\text{N}_2(\text{s}) + 6\text{NH}_4\text{Cl}(\text{s})$
Heat release at 773 K	–	-994.3 kJ/mol	-44.0 kJ/mol
NH_3 product	$\text{NH}_3 + \text{water}$	$\text{NH}_3 + \text{HCl}$	Pure NH_3
MgCl_2 product	Hydrous	Anhydrous	Anhydrous
Speed	fast	slow	fast
Reaction extent	100%	90%	100%

The table compares reaction heats, speeds and extends of forms of the NH_3 and MgCl_2 product of reactions between Mg_3N_2 and HCl or NH_4Cl . $\text{Mg}_3\text{N}_2(\text{s})$, solid Mg_3N_2 ; HCl(a), aqueous hydrochloric acid; HCl(g), HCl gas; $\text{NH}_4\text{Cl}(\text{s})$, solid NH_4Cl .

