

Accepted Manuscript

Title: Effect of SO_4^{2-} on the corrosion of 316L stainless steel in molten FLiNaK salt

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PII: S0010-938X(18)30564-X
DOI: <https://doi.org/10.1016/j.corsci.2018.08.057>
Reference: CS 7693

To appear in:

Received date: 26-3-2018
Revised date: 17-8-2018
Accepted date: 27-8-2018

Please cite this article as: Qiu J, Leng B, Liu H, Macdonald DD, Wu A, Jia Y, Xue W, Yu G, Zhou X, Effect of SO_4^{2-} on the corrosion of 316L stainless steel in molten FLiNaK salt, *Corrosion Science* (2018), <https://doi.org/10.1016/j.corsci.2018.08.057>

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Effect of SO_4^{2-} on the corrosion of 316L stainless steel in molten FLiNaK salt

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Highlights

- High temperature corrosion of 316L stainless steel in molten FLiNaK salt.
- Effect of SO_4^{2-} on the corrosion of 316L stainless steel in molten FLiNaK salt.
- The SO_4^{2-} in the FLiNaK salt remarkably accelerates the corrosion of 316L stainless steel.
- The SO_4^{2-} can react with Mn in the 316L stainless steel to form MnS at the high temperature molten FLiNaK salt.

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