OAK RIDGE NATIONAL LABORATORY
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Thermal Destruction of Perchlorate in Ferric Chloride Regenerant Solution

Disclosure Number

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Technology Summary

Destruction of Perchlorate in Ferric Chloride Regenerant Solution The subject invention disclosed herein is a method for complete destruction or reduction of perchlorate in ferric chloride solution. The method of the subject invention is particularly suitable for the destruction of perchlorate in ferric chloride regenerant solutions which may be utilized for the regeneration of perchlorate-loaded anion exchange resins. While perchlorate is completely decomposed, the treatment process does not alter the property of the regenerant solution so that it can be reused indefinitely. The subject invention thus has enormous economic implications wherein the method of the subject invention not only requires a reduced volume of regenerant solution, but also eliminates the disposal of hazardous waste regenerant solutions containing perchlorate.

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