

氧化还原树脂除去纯水中的溶解氧

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摘要 本文介绍了一种新型的除氧树脂——Y-12-06型氧化还原树脂。该树脂的除氧容量为9—13 gO₂/l湿树脂。11除氧树脂可制备含0.1ppm以下的无氧纯水 1.5 t以上,流出水的含氧量通常在 5—40 ppb。该树脂除氧速度快,每小时通过的水量为树脂体积的 150倍时,除氧仍能满足要求。在除氧树脂柱后串联一个普通混合离子交换树脂柱,可制备无氧高纯水,出水电阻率一般为 5—10 MΩ·cm,最高可达18 MΩ·cm。出水的pH值为中性。

关键词 [氧化还原除氧树脂](#) [除氧容量](#) [氧含量](#)

分类号

STUDY ON REMOVING DISSOLVED OXYGEN IN PURE WATER BY REDOX RESIN

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Abstract Y-12-06 type redox resin, a copper hydrazine complex resin developed in recent years, is used to remove dissolved oxygen from pure water in a closed recirculating water system to minimize corrosion. The test results show that the oxygen-removing capacity of the resin is 9--13 g O₂/l resin. In general, when air-saturated water has been passed through the deoxygenating resin column, the oxygen content of effluent water is found to be 5--40 ppb. Over 1.5 tons deoxygenated pure water containing oxygen less than 0.1 ppm can be obtained by each liter redox resin. Good results can be achieved even when flow rate through the column is raised to 150-fold bed volume water per hour. When deionized water is passed first through a redox resin, and then through the mixed-bed (H-OH resin), a high quality water having a specific resistance of from 5--18×10⁶ ohms-cm can be obtained. The pH of the effluent water is 7.

Key words [Redox resin](#) [Oxygen removing capacity](#) [Dissolved oxygen](#)

DOI

扩展功能

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