

PROCESS AND PRODUCT TECHNOLOGY

氯化铜脱除硫化氢气体制硫磺研究

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**摘要** A novel technology of removing H<sub>2</sub>S with cupric chloride solution was developed in this paper. Cupric as the form of CuS deposition, the CuS produced was then oxidized by excessive cupric ion in another reactor meanwhile cupric ion that has been consumed can be recovered by the oxidization of with oxygen in air, and the solution can be circulated. Moreover, the leaching kinetics of CuS by cupric ion was studied. The removal efficiency of H<sub>2</sub>S is close to 100%, and the required operating condition is mild. Compared with other wet oxidation methods, no raw material is consumed except O<sub>2</sub> in air, the process has no secondary pollution and no problem of degradation and scale, and the absorbent is much stable and reliable.

**关键词** [cupric chloride](#) [H<sub>2</sub>S](#) [oxidation](#)

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**H<sub>2</sub>S removal with cupric chloride for producing sulfur**

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**Abstract** A novel technology of removing H<sub>2</sub>S with cupric chloride solution was developed in this paper. Cupric as the form of CuS deposition, the CuS produced was then oxidized by excessive cupric ion in another reactor meanwhile cupric ion that has been consumed can be recovered by the oxidization of with oxygen in air, and the solution can be circulated. Moreover, the leaching kinetics of CuS by cupric ion was studied. The removal efficiency of H<sub>2</sub>S is close to 100%, and the required operating condition is mild. Compared with other wet oxidation methods, no raw material is consumed except O<sub>2</sub> in air, the process has no secondary pollution and no problem of degradation and scale, and the absorbent is much stable and reliable.

**Key words** [cupric chloride](#); [H<sub>2</sub>S](#); [oxidation](#).

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