

[Available Issues](#) | [Japanese](#)

Author: [ADVANCED](#) | Volume Page
Keyword:



[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

Food Science and Technology International, Tokyo

Vol. 2 (1996) , No. 2 pp.120-123

Desorption Behavior of Deposit Formed from Coffee on Stainless Steel Surfaces

[Tokio TAKAHASHI](#)¹⁾, [Tadashi NAGAI](#)¹⁾, [Takaharu SAKIYAMA](#),
[NAKANISHI](#)²⁾

1) *Technical Development Department, Technological Development Ltd.*

2) *Department of Biotechnology, Faculty of Engineering, Okayama University*

(Received: November 17, 1995)

The desorption behavior of fouling deposits, which had been formed from coffee particles from coffee drinks, was studied using various detergents. The deposits from coffee drinks was difficult to remove from stainless steel surfaces by NaOH solution. Usually effective in removing deposits consisting of organic substances, the detergents tested, a chlorinated alkaline cleaner was the most effective for removing the deposit formed from coffee drinks. Both in the chlorinated alkaline solution and in the alkaline solution, the desorption rate of the deposit followed first-order kinetics.

rate constant for cleaning with the chlorinated alkaline cleaner was NaOH solution. The desorption rate constant depended not only on the conditions under which the deposit formed. In the case of a deposit formed from a solution containing β -lactoglobulin and tannic acid, the desorption reaction proceeded in two stages. This reaction was not described by simple first order

Keywords: [cleaning](#), [desorption](#), [soft drink](#), [deposit](#), [detergent](#), [\$\beta\$ -stainless steel](#)

[\[PDF \(526K\)\]](#) [\[References\]](#)

Download

To cite this article:

Tokio TAKAHASHI, Tadashi NAGAI, Takaharu SAKIYAMA and TOSIYUKI NAKANISHI, **Desorption Behavior of Deposit Formed from Stainless Steel Surfaces** *FSTI*. Vol. **2**, 120-123. (1996) .

doi:10.3136/fsti9596t9798.2.120