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—ABSTRACT FROM THE TRANSACTIONS—

STUDIES ON SOYBEAN PROTEIN FIBERS 8
ACCORDING TO THE EFFECT OF CAUSTIC SODA-SODIUM HYDRO-
SULFITE MIXTURE UPON SOYBEAN PROTEIN.

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The effect of caustic soda-sodium hydrosulfite mixture upon soybean proteins studied.

The results obtained were as follows;

1. The amount of extracted and precipitated proteins from oil-free flakes by this mixture was higher than that of caustic soda.
2. Protein cake obtained by this mixture from oil-free flakes was felt elastically, this property became greater by the increasing quantity of sodium hydrosulfite. Therefore the protein cake obtained by sodium hydrosulfite without caustic soda was felt very elastically as if gum.
3. The viscosity of the spinning solution prepared from protein cakes which was obtained by this mixture showed a more gradual viscosity change than the spinning solution prepared from caustic soda extracted protein cake.
4. The spinning solution was prepared from caustic soda extracted protein cake by dissolving it with this mixture. This spinning solution showed the special property that the viscosity was very low at first, but gradually increased to fit for spinning.

When the proportion of sodium hydrosulfite to caustic soda was increased, the viscosity of spinning solution increased with the time of ripening and finally to gel.

Toyo Rayon Co., Ltd. Research Dept.