

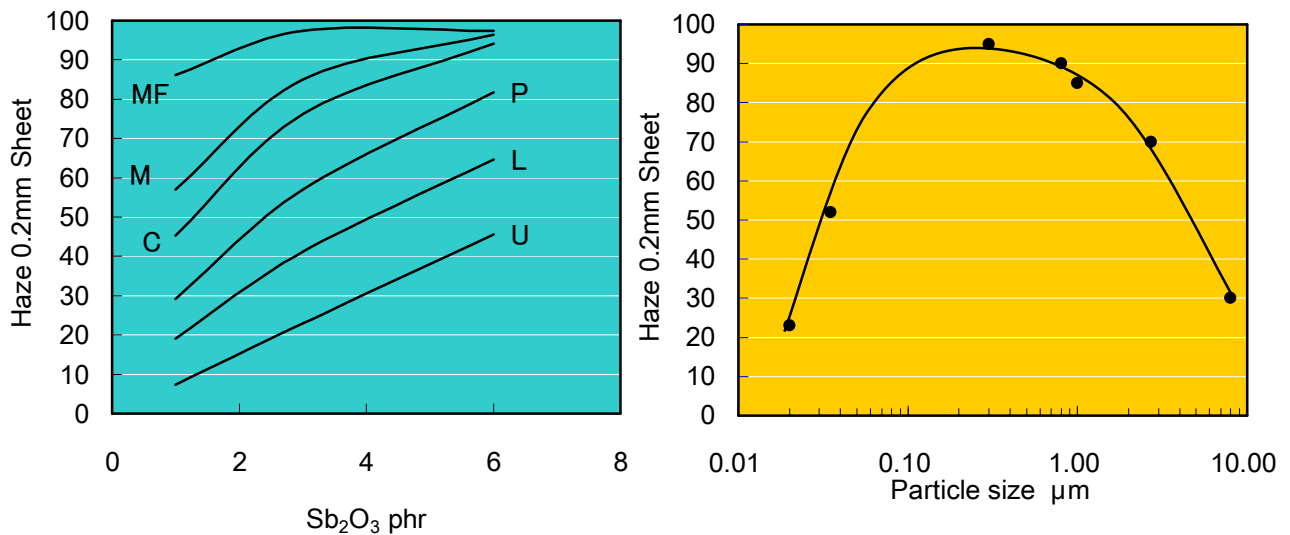
## THE RELATION BETWEEN PARTICLE SIZE OF ANTIMONY TRIOXIDE AND TRANSPARENCY OF PVC FILM

Antimony trioxide has been a common additive to be used as a flame retardant and white pigment for many years. The pigment-effect however may cause some problems in the transparency of resin production. We examined the relation between the particle size of antimony trioxide and the transparency of PVC film. The results of our study are shown below.

### Methods

PVC	100Phr	Mixing	Pressing	Measurement
DOP	50Phr	→ 155°C	→ 0.2mm	→ of Haze
Stabilizer	3phr		thickness	
Sb <sub>2</sub> O <sub>3</sub>	variable			

### Results



The above results tell us the followings :

1. Transparency of a film varies depending on the particle size of antimony trioxide.
2. The proper particle size of antimony trioxide should be selected to satisfy the requirements of the final products.

PATOX-M or PATOX-MF with a fine particle size are suitable to white color products, while PATOX-L or PATOX-P with a larger particle size are for clean colored films.

\* The statement and methods presented herein about the products are based upon the best available data and practices currently known to us. However they are neither presentations nor warranties of performance, results or comprehensiveness of such data, and further they do not imply any recommendation to infringe any patent or offer of a license under any license.



<b>Head Office</b>	3-2 Shimomiyabi-cho, Shinjuku-ku, Tokyo 162-0822, Japan TEL 81-3-3235-0021 81-3-3235-0031 (Sales Department) FAX 81-3-5261-7335
<b>Osaka Branch</b>	Daido Seimei South Building, 1-2-11 Edobori, Nishi-ku, Osaka 550-0002, Japan TEL 81-6-7711-0120 FAX 81-6-7711-0121
<b>Nakase Refinery</b>	1198 Yoshii, Yabu-shi, Hyogo 667-1111, Japan TEL 81-79-667-2121 FAX 81-79-663-5000

<http://www.nihonseiko.co.jp>