

Title	Some Considerations on the Measuring Method of the Thixotropic Properties of Some Clay Slips
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Citation	Bulletin of the Institute for Chemical Research, Kyoto University (1962), 39(6): 412-412
Issue Date	1962-03-25
URL	http://hdl.handle.net/2433/75864
Right	
Type	Departmental Bulletin Paper
Textversion	publisher

ABSTRACTS

the amount of platinum, 0.01%, was too small to have an effect on $\tan \delta$, and also the cardinal component of base glass, such as MgO, Al_2O_3 and SiO_2 behaved themselves rather indifferent. On the contrary, Li_2O showed a strong influence, and the decrease of Li_2O content seemed to be especially favourable for the formation of β -spodumen and consequently the lowering of $\tan \delta$.

(3) **Effect of additional components.** The glasses of the base composition, Li_2O 4, MgO 15, Al_2O_3 15, and SiO_2 62 by weight, and added by a small amount of any of the components, Na_2O , K_2O , BeO, CaO, SrO, ZnO, CdO or PbO were melted and reheated at above 950°C. Among such second components PbO was the most effective, giving $\tan \delta$ of $3\sim 4 \times 10^{-4}$ at 1 Mc at room temperature with the addition of PbO: 0.045 mols to 104g of the base glass.

Some Considerations on the Measuring Method of the Thixotropic Properties of Some Clay Slips

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*Zairyo Shiken (Journal of the Japan Society for
Testing Materials)*, 10, 328 (1961)

Two measuring methods are mainly used to obtain the thixotropic properties of clay slips. One of these is the method to measure the thixotropic properties by the stress decay, and the other is the hysteresis loop method.

The author has already reported the results obtained through the stress decay method, and here in this paper, the results gained from the hysteresis loop method are reported.

The results obtained by this method indicate that

(1) the hysteresis area, that is, thixotropic behavior, of the clay slips, decreases exponentially with the increase of the water content,

(2) the hysteresis area, also, decreases exponentially with the increase of the amount of deflocculant quantity.

The thixotropic levels are decided by the method of the stress decay, and the degrees of thixotropic behavior may be obtained by the hysteresis loops, and yet no distinct relation has been found so far between the thixotropic levels and degrees of thixotropy. In this paper, we obtain the conversing constant between the two quantities experimentally, and the conversing constant are decided using several clay slips.