

1926

The Effect of the Addition of Sodium Carbonate and Sodium Silicate on the Casting Properties of Clay Slip

F. E. Brown
Iowa State College

Chi-fang Lai
Iowa State College

Let us know how access to this document benefits you

Copyright ©1926 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

Recommended Citation

Brown, F. E. and Lai, Chi-fang (1926) "The Effect of the Addition of Sodium Carbonate and Sodium Silicate on the Casting Properties of Clay Slip," *Proceedings of the Iowa Academy of Science*, 33(1), 170-170.
Available at: <https://scholarworks.uni.edu/pias/vol33/iss1/25>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

A VALENCE-NAME-FORMULA-SOLUBILITY CHART

G. N. QUAM

(ABSTRACT)

The chart includes the names and symbols of all the common radicals used in general chemistry courses arranged in a definite order according to valence. Each small rectangular space formed by horizontal and vertical lines including a positive and negative radical represents a compound and contains a symbol representing the solubility in grams per 100 grams of water at 18 degrees centigrade. Each large rectangular space represents compounds having a common type formula.

The primary purpose of the chart is to aid the student in acquiring speedily a working knowledge of valence, radicals and formula writing.

COE COLLEGE,
CEDAR RAPIDS, IOWA.

THE EFFECT OF THE ADDITION OF SODIUM CARBONATE AND SODIUM SILICATE ON THE CASTING PROPERTIES OF CLAY SLIP

F. E. BROWN AND CHI-FANG LAI

(ABSTRACT)

The addition of small amounts of Na_2CO_3 , or of Na_2SiO_3 increases the plasticity of some clay slips and permits them to be cast when they contain a much smaller percentage of water. This permits a much more rapid casting. Casts were made and removed from the mould in 20 minutes. The time for a cast increased for successive casts as the mould became filled with water. After drying the original rate was possible. A mixture of Na_2CO_3 and Na_2SiO_3 was found to be superior to either alone.

The use of these salts did not injure either the mould or the quality of the pieces cast. As many as 100 pieces were cast in one mould.

IOWA STATE COLLEGE,
AMES, IOWA.