

DEPARTMENT OF COMMERCE

# Bureau of Standards

## Certificate

FOR

STANDARD TEMPERATURE SAMPLE

No. 43b

ZINC

FREEZING POINT OR MELTING POINT

419. 4<sub>3</sub>° C.

The metal will have the freezing or melting point certified only if it is protected from oxidation and contamination. Full details of the precautions that should be observed in standardizing instruments at the freezing points of pure metals are given in Bureau of Standards Circular No. 66 on Standard Samples for Thermometric Fixed Points. Further information is given in Bureau of Standards Technologic Paper No. 170 on Pyrometric Practice.

NOTE.—The standard samples of zinc issued from 1916 to 1926 were part of Lots Nos. 43 and 43a. The freezing point of Lot No. 43 as determined in 1916 was 419. 4<sub>1</sub>° C., and at that time it was considered advisable to round this off to 419. 4° C. Subsequently Lot 43a was found to have the same freezing point. Recent determinations indicate that the freezing point of Lot 43a is 419. 4<sub>8</sub>° C. The freezing point of Lot 43b has been determined as 419. 4<sub>3</sub>° C., as given in this certificate. Obviously, in comparing samples 43a and 43b completely consistent results will be obtained only if the freezing points are taken as 419. 4<sub>8</sub>° and 419. 4<sub>3</sub>°, respectively.

*George H. Burgess*

*Director.*

*Washington, D. C.*

October 12, 1926.