

ABSTRACT

A crucible protection sheet is provided that can prevent damages to an inner crucible, hinder an outer crucible from silicon-carbidization, and transmit heat from the outer crucible to the inner crucible uniformly.

5 In a crucible having an inner crucible 2 and an outer crucible 3, the crucible protection sheet is arranged between the two crucibles and is made of expanded graphite. The planar thermal conductivity is 120 W/(m•K) or higher, the gas permeability is less than 1.0×10^{-4} cm²/s, and the compression ratio is 20% or higher when the sheet is compressed in a thickness direction at a pressure of 34.3 MPa. Since the compression
10 ratio is high, the effect of preventing breakage is great when inserting the inner crucible, improving workability and preventing the inner crucible from tilting inside the outer crucible. In addition, even though the compression ratio is high, the thermal conductivity is kept to such a degree that the inner crucible can be heated uniformly, and the gas shielding capability is also ensured. As a result, the outer crucible is prevented
15 from silicon-carbidization and thickness decrease.