2 As part of the 1945 Manhattan project, the United States Army tested the first-of-its-kind nuclear weapon in New Mexico.

The explosion resulted in a radiant, hemispherical blast wave of radius R which could be modelled using

$$R = s\left(\frac{Et^2}{\rho}\right)^{0.2}$$

where E = energy released due to explosion,
t = time elapsed after detonation,
ρ = density of air.

What is the SI unit of the quantity s?

A (dimensionless)
B $m^{0.2}$
C $J^{0.2}\ m^{-0.2}\ s^{0.4}\ kg^{-0.2}$
D $J^{-1}\ m^{2}\ s^{-2}\ kg$