

Its fracture uneven, or earthy, and porous, commonly filled with particles of pumice, quartz, scoriæ, &c.

Hardness, 3. Very brittle. Sp. gr. from 2,570, which is that of the black, to 2,785, rarely 2,8. Has an earthy smell.

It is not diffusible in cold water, but in boiling water it gradually deposits a fine earth. It does not effervesce with acids.

Heated it assumes a darker colour, and easily melts into a black slag, or with borax into a yellowish green glass.

It is magnetic before it is heated, but not after. This is the most remarkable of its properties.

By Mr. Bergman's analysis, it contains from 55 to 60 per ct. of silice, 19 to 20 of argill, 5 or 6 of iron, and from 15 to 20 of iron. 3 Bergm. p. 194.

When mixed with a small proportion of lime it quickly hardens, and this induration takes place even under water. This singular property appears to me to proceed from the magnetic state of the iron it contains, for this iron being unoxigenated, subtilly divided, and dispersed through the whole mass, and thus offering a large surface, quickly decomposes the water with which it is mixed, when made into mortar, and forms a hard substance analogous to the specular iron ore as it does in the iron tubes, in which water is decomposed, in Mr. Lavoisier's and Dr. Priestley's Experiments. For in these the iron swells and increases in bulk, Mem. Par. 1781, p. 277. And to does pouzzolana when formed into mortar. Higgins on Cements, 125. One principal use of lime seems to be to heat the water, as while cold it