

melted by pure air it gradually dissipates.—Mineral alkali melts it with effervescence, borax and microcosmic salt with scarce any; the first decomposes it, the two last extract no colour from it.

It does not form a plaster, as gypsoms do; yet Gerhard denies this.

It contains about 84 per ct. of barytes, the remainder vitriolic acid and water, per Bergman. But artificial baroselenite contains 67 of earth and 33 of vitriolic acid and water, per Klaproth 2. Chym. An 1785.219. or 65 of earth and 35 of acid and water, per Fourcroy 4 Chem. An. 65. And Dr. Withering's experiments appear to me to prove, that 100 parts marmor metallicum contain 68,5 pure earth and 31,5 acid, as strong as that contained in tartar vitriolate. See Phil. Trans. 1784, 304. According to Dr. Withering's own calculation, 100 parts of this stone contain 67,2 of pure barytes, and 32,8 of vitriolic acid, which agrees almost exactly with Klaproth's determination.

Baroselenite is frequently contaminated with selenite, filix, iron, and aërated calx, and hence sometimes slightly effervesces with acids.

To analyze and purify it, Mr. Afswelius uses the following processes:

1st. After pulverization, it is mixed and calcined with 2,5 times its weight of aërated mineral alkali, perfectly pure and deprived of its water of crystallization, in a red heat for one hour and an half, avoiding fusion. A double decomposition thus takes place.

2d. Glauber's salt and the superfluous alkali being then separated by lotion and coction, the residuum is boiled for 3 hours in 10 times its weight of distilled vinegar, whose sp. gr. is 1,033. This takes