28.16 - Hydroxide and peroxide of magnesium; oxides, hydroxides and peroxides, of strontium or barium.

2816.10 - Hydroxide and peroxide of magnesium

2816.40 - Oxides, hydroxides and peroxides, of strontium or barium

(A) MAGNESIUM HYDROXIDE AND PEROXIDE

(1) **Magnesium hydroxide** ($Mg(OH)_2$). White powder, heavier than magnesium oxide; stable but forming the carbonate slowly when exposed to air. Used in pharmacy.

(2) **Magnesium peroxide** (MgO_2). Prepared by the action of hydrogen peroxide on magnesium hydroxide. White powder, containing oxide as impurity; almost insoluble in water. Used for bleaching feathers, in preparing dentifrices or as a gastro-intestinal antiseptic.

Magnesium oxide is **excluded** (**heading 25.19** or if in the form of cultured crystals weighing not less than 2.5 g each, **heading 38.24**).

(B) STRONTIUM OXIDE, HYDROXIDE AND PEROXIDE

(1) **Strontium oxide** (anhydrous or caustic strontia) (SrO). Prepared by calcining precipitated strontium carbonate. Porous white, hygroscopic powder, soluble in water. Forms the carbonate when exposed to air. Used in pyrotechnics or medicine and for preparing strontium hydroxide and pigments.

(2) **Strontium hydroxide** ($Sr(OH)_2$). Exists in the anhydrous amorphous state or crystallised with 8 H_2O; forms the carbonate when exposed to air. Used in glass manufacture, and for the preparation of strontium salts and luminous pigments.

(3) **Strontium peroxide** (SrO_2). Prepared by the action of oxygen on strontium oxide. White powder, decomposed by hot water. Used in pyrotechnics.

(C) BARIUM OXIDE, HYDROXIDE AND PEROXIDE

(1) **Barium oxide** (anhydrous baryta) (BaO). This product must not be confused with natural barium sulphate, sometimes known as barytes. It is obtained by calcining precipitated barium nitrate or precipitated barium carbonate, or by hydrolysing barium silicate. Barium oxide resembles strontium oxide in appearance, but is heavier (specific gravity about 5.5) and can crystallise. Used for preparing barium hydroxide and peroxide and barium metal.

The heading **excludes** the crude product obtained by merely calcining witherite (**heading 25.11**).

(2) **Barium hydroxide** ($Ba(OH)_2$). Usually in the form of whitish and efflorescent lamellar crystals (with 8 H_2O) or as an aqueous solution (baryta water). Used in : the glass industry; for producing glass X-ray shields; in pottery; for purifying water; manufacture of potassium hydroxide and of various barium compounds.

(3) **Barium peroxide** (BaO_2). Prepared by heating barium oxide in air freed of carbon dioxide. White powder or insoluble greyish lumps (specific gravity about 5). When decomposed by water it produces hydrogen peroxide; used for the manufacture of the latter.