28.17 - Zinc oxide; zinc peroxide.

(A) ZINC OXIDE

Zinc oxide (zinc white) (ZnO) is obtained by burning zinc vapour with oxygen from air. The zinc vapour is obtained by vaporising metallic zinc (indirect or French process) or by the reduction of oxidic zinc raw materials like zinc ores (roasted blende, calamine – **heading 26.08**) with carbon (direct or American process). In these processes, the oxide is collected in bag houses or chambers forming deposits of increasingly pure oxides.

In the wet process, zinc is leached from zinc containing raw materials and then precipitated as zinc hydroxide or carbonate. The precipitate is filtered, washed, dried and calcinated to ZnO. Zinc oxide is a fine white powder which turns yellow on heating. It is of amphoteric nature, soluble in acids and alkalis.

Zinc oxide is mainly used in industrial paints. It is also used in the rubber industry, ceramic, glass manufacturing, electronics and pharmaceuticals. Zinc oxide is also a precursor of a wide variety of inorganic or organic salts used in the manufacture of plastics.

The zincates of heading 28.41 correspond to this amphoteric oxide.

(B) ZINC PEROXIDE

Zinc peroxide (ZnO_2) White powder, insoluble in water. Used in medicine, either pure or with zinc oxide as impurity, and also for preparing cosmetics.

This heading **does not include** :

(a) Natural zinc oxide or zincite (**heading 26.08**).

(b) Residues of zinc metallurgy known as zinc scurf, skimmings or dross, which also consist of impure oxides (**heading 26.20**).

(c) Zinc hydroxide ($Zn(OH)_2$) or gelatinous white, or the hydroperoxide (**heading 28.25**).

(d) The impure zinc oxide, sometimes known as zinc grey (**heading 32.06**).