

*Hue:* Opaque white pigment.  
*Bulk value:* 17. Concentrated paste: 75 per cent.  
*Application:* An opaque white pigment of limited use for the manufacture of tint colours. Has good printing qualities and like lithopone reduces appearance of mottle in tints.

#### Calcium Carbonate

(C.I. Pigment White 18; C.I. 77220)

*Origin:* By precipitation with carbon dioxide from hydrated lime slurry. The pigment is prepared in surface coated and uncoated forms. Surface treatment usually consists of coating with soaps.

*Hue:* White transparent extender.

*Bulk value:* 38. Concentrated paste: 55 per cent.

*Application:* Chemically precipitated calcium carbonate is a pigment of recent introduction. Both coated and uncoated forms are used as printing ink extenders. The behaviour of the different forms depends on the vehicle used, which must therefore be independently evaluated with specific varnishes. The pigment is bulky and has excellent printing qualities. Being also inexpensive it is rapidly replacing alumina and gloss white as a general purpose printing-ink extender.

It is not recommended for use in highly acid varnishes, such as moisture-set varnishes, in some of which it is decomposed with the evolution of carbon dioxide. Natural chalk (whiting) is only used in copperplate and silk-screen inks.

#### Magnesium Carbonate

(C.I. Pigment White 18; C.I. 77713)

*Origin:* By precipitation from solutions of magnesium bicarbonate. It is a mixture of magnesium carbonate and magnesium hydroxide.

*Hue:* A transparent white extender.

*Bulk value:* 45. Concentrated paste: 65 per cent.

*Application:* Used to a limited extent as an extender in letterpress, litho and photogravure inks. Has good printing qualities and gives a matt finish to prints. Being basic in character it should not be used in highly acid vehicles.