CHLORINE AND ITS COMPOUNDS

MARKING SCHEME

- 1. i) Anhydrous calcium chloride
 - ii) A white ppt is formed

HCl gas forms Cl- ions solution which react with silver ions to form silver chloride which is insoluble

OR

$$HCl_{(aq)} + AgNo_{3(aq)} \longrightarrow HNO_{3(aq)} + AgCl_{(s)} \checkmark 1mk$$

White ppt $\checkmark \frac{1}{2}$

 $Cl_{(aq)} + Ag_{(aq)} \longrightarrow Agcl_{(s)}$

2.a) Potassium manganate VII (½)

Manganese IV Oxide (½) Lead IV Oxide (½) Any two 1mk

b) It is a bleaching agent

3. a) Oxidizing agent

b)
$$4HCl_{(aq)} + MnO_{2(s)}$$
 \longrightarrow $MnCl_{2(aq)} + Cl_{2(g)} + 2H_2O_{(l)}$

- 4. a) $2OCl_{(aq)} \longrightarrow 2Cl_{(aq)} + 0_{2(g)} \checkmark 1$
 - b) Time candle brightness√1 Colourless liquid (droplets) forms on walls√1
 - c) polypropene√½
 ropes√½
 Polytetraflouroethene Tetraflouroethene√½

Making