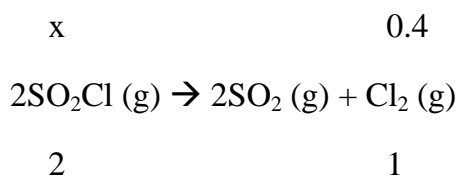If *"cabbage calorific gas"* is cabbage colorific gas and is Cl_2, solution is next:

It is possible to find amount of SO_2Cl that was decomposed to produce 0.4 mol of Cl_2

$$x \qquad\qquad\qquad 0.4$$

$$2SO_2Cl\ (g) \rightarrow 2SO_2\ (g) + Cl_2\ (g)$$

$$2 \qquad\qquad\qquad 1$$

X = 2*0.4 =0,8 mol

Degree of dissociation is:

w = 0.8 /1.2 *100% =66,67 %