By Mole Method:

$3H_8N_2O_4S$	+	$2AlCl_3$	→	$6NH_4Cl$	+	$Al_2O_{12}S_3$
g=?		189 g		g=?		g=?

$$No.\,of\ Mole\ (2AlCl3) = \frac{Weight}{Molecular\ Weight}$$

$$= \frac{189\ g}{264\ g/mole}$$

= 0.716 mol

Weight ($3H_8N_2O_4S$) = No. of mole × Molecular weight

= 0.716 mol x 396 g/mol

= 283.5 g

Weight ($6NH_4Cl$) = No. of mole × Molecular weight

= 0.716 mol x 318 g/mol

= 227.66 g

Weight ($Al_2O_{12}S_3$) = No. of mole × Molecular weight

= 0.716 mol x 342 g/mol

= 244.84 g

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Check:

$3H_8N_2O_4S$	+	$2AlCl_3$	→	$6NH_4Cl$	+	$Al_2O_{12}S_3$
g=?		189 g		g=?		g=?
283.5 g		189 g		227.66 g		244.84 g
472.5 g			=	**472.5 g**		