

Table 1

British Production of Key Precursors for Civil Uses

<u>Key Precursors for super toxic lethal chemicals</u>	<u>Number of Companies in United Kingdom producing these Precursors</u>
Phosphorus trichloride (PCl <sub>3</sub> )	1
Phosphorus oxychloride (POCl <sub>3</sub> )	1
Chemicals containing the P-methyl and/or P-ethyl bond	0
Methyl and/or ethyl esters of phosphorous acid	1
3,3 dimethyl butanol-2 (pinacolyl alcohol)	0
N,N disubstituted β - amino ethanol	2
N,N disubstituted β - amino ethane thiol	0
N,N disubstituted β - amino ethyl halides (halide = Cl, Br or I)	1
<u>Key Precursors for other super-toxic chemicals</u>	
Phenyl, alkyl or cycloalkyl substituted glycolic acid	
3- or 4-hydroxy piperidine and their derivatives	0*

\* = Some small-scale production for pharmaceutical purposes

Table 2

British Civil Uses of Key Precursors

<u>Key Precursor</u>	<u>Purpose</u>
Phosphorous trichloride (PCl <sub>3</sub> )	- (a) phosphorylating agent (b) chlorinating agent to make acid and alkyl halides (c) catalyst (d) to make organic phosphates, germicides and medicinals
Phosphorous oxychloride (POCl <sub>3</sub> )	- (a) chlorinating agent (b) catalyst for dye stuffs and pharmaceuticals (c) petrol additives, plasticizers and organic phosphates
Methyl and/or ethyl esters of phosphorous acid	- (a) flame retardant
N,N disubstituted β - amino ethanol	- (a) water treatment chemical (corrosion control)
N,N disubstituted β - amino ethyl halides	- (a) cationic starch (b) to make filter papers