

$HS \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	7×6
	2	0	$77_1 = \chi_3, \varphi_3$
	3	0	$154_1 = \chi_4, \varphi_4$
	4	0	$154_2 = \chi_5, \varphi_5$
	5	0	$154_3 = \chi_6, \varphi_6$
	6	0	$175_1 = \chi_7, \varphi_7$
	7	0	$231_1 = \chi_8, \varphi_8$
	8	0	$693_1 = \chi_9, \varphi_{10}$
	9	0	$770_1 = \chi_{10}, \varphi_{11}$
	10	0	$770_2 = \chi_{11}, \varphi_{12}$
	$11 = \overline{10}$	0	$770_3 = \chi_{12}, \varphi_{13}$
	12	0	$896_1 = \chi_{14}, \varphi_{15}$
	$13 = \overline{12}$	0	$896_2 = \chi_{15}, \varphi_{16}$
	14	0	$1386_1 = \chi_{17}, \varphi_{18}$
	15	0	$1750_1 = \chi_{19}, \varphi_{19}$
	16	0	$1925_1 = \chi_{20}, \varphi_{20}$
	17	0	$1925_2 = \chi_{21}, \varphi_{21}$
	18	0	$2520_1 = \chi_{22}, \varphi_{23}$
$2.G :$	19	0	$56_1 = \chi_{25}, \varphi_{24}$
	20	1	7×6
	21	0	$616_1 = \chi_{28}, \varphi_{29}$
	$22 = \overline{21}$	0	$616_2 = \chi_{29}, \varphi_{30}$
	23	0	$924_1 = \chi_{30}, \varphi_{31}$
	$24 = \overline{23}$	0	$924_2 = \chi_{31}, \varphi_{32}$
	25	0	$1232_1 = \chi_{33}, \varphi_{33}$
	$26 = \overline{25}$	0	$1232_2 = \chi_{34}, \varphi_{34}$
	27	0	$1792_1 = \chi_{35}, \varphi_{35}$
	28	0	$1848_1 = \chi_{36}, \varphi_{38}$
	29	0	$2520_2 = \chi_{41}, \varphi_{39}$
	30	0	$2520_3 = \chi_{42}, \varphi_{40}$

Block 1:	φ_1	φ_2	φ_9	φ_{14}	φ_{17}	φ_{22}	
$1_1 = \chi_1$	1	.	.	.	.	.	$\varphi_1 = 1_1$
$22_1 = \chi_2$	.	1	.	.	.	.	$\varphi_2 = 22_1$
$825_1 = \chi_{13}$	.	1	.	1	.	.	$\varphi_9 = 605_1$
$1056_1 = \chi_{16}$	1	.	.	.	1	.	$\varphi_{14} = 803_1$
$1408_1 = \chi_{18}$	.	.	1	1	.	.	$\varphi_{17} = 1055_1$
$2750_1 = \chi_{23}$	.	.	1	.	.	1	$\varphi_{22} = 2145_1$
$3200_1 = \chi_{24}$	.	.	.	.	1	1	

Block 20:	φ_{25}	φ_{26}	φ_{27}	φ_{28}	φ_{36}	φ_{37}
$176_1 = \chi_{26}$	1	.	.	.	.	.
$176_2 = \chi_{27}$	.	1	.	.	.	.
$1000_1 = \chi_{32}$	.	.	1	1	.	.
$1980_1 = \chi_{37}$	1	.	.	.	1	.
$1980_2 = \chi_{38}$	.	1	.	.	.	1
$2304_1 = \chi_{39}$	.	.	.	1	.	1
$2304_2 = \chi_{40}$	.	.	1	.	1	.

$$\begin{aligned}
\varphi_{25} &= 176_1 \\
\varphi_{26} &= 176_2 \\
\varphi_{27} &= 500_1 \\
\varphi_{28} &= 500_2 \\
\varphi_{36} &= 1804_1 \\
\varphi_{37} &= 1804_2
\end{aligned}$$