

$S_6(2) \pmod{2}$

	blocks	defect	matrix
$2.G :$	1 2	10 1	41×7 2×1

Block 1:	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7
$1_1 = \chi_1$	1	.	.	.	.	.	.
$7_1 = \chi_2$	1	1	.	.	.	.	.
$15_1 = \chi_3$	1	1	1	.	.	.	.
$21_1 = \chi_4$	1	1	.	1	.	.	.
$21_2 = \chi_5$	1	1	.	1	.	.	.
$27_1 = \chi_6$	1	2	.	1	.	.	.
$35_1 = \chi_7$	1	2	1	1	.	.	.
$35_2 = \chi_8$	1	2	1	1	.	.	.
$56_1 = \chi_9$	2	3	1	2	.	.	.
$70_1 = \chi_{10}$	2	1	.	1	1	.	.
$84_1 = \chi_{11}$	2	2	1	1	1	.	.
$105_1 = \chi_{12}$	1	2	.	2	.	1	.
$105_2 = \chi_{13}$	3	3	1	2	1	.	.
$105_3 = \chi_{14}$	3	3	1	2	1	.	.
$120_1 = \chi_{15}$	2	3	1	2	.	1	.
$168_1 = \chi_{16}$	2	2	.	3	1	1	.
$189_1 = \chi_{17}$	3	4	1	3	1	1	.
$189_2 = \chi_{18}$	3	4	1	3	1	1	.
$189_3 = \chi_{19}$	3	4	1	3	1	1	.
$210_1 = \chi_{20}$	4	5	1	4	1	1	.
$210_2 = \chi_{21}$	2	3	2	1	1	.	1
$216_1 = \chi_{22}$	2	3	1	2	1	.	1
$280_1 = \chi_{23}$	6	6	1	5	2	1	.
$280_2 = \chi_{24}$	2	3	1	2	1	1	1
$315_1 = \chi_{25}$	3	5	2	3	1	1	1
$336_1 = \chi_{26}$	4	6	2	4	1	1	1
$378_1 = \chi_{27}$	4	5	2	4	2	1	1
$405_1 = \chi_{28}$	5	7	2	5	2	1	1
$420_1 = \chi_{29}$	6	8	3	5	2	1	1
$8_1 = \chi_{31}$	.	.	1	.	.	.	.
$48_1 = \chi_{32}$	.	.	.	.	1	.	.
$64_1 = \chi_{33}$	.	.	.	.	.	1	.
$64_2 = \chi_{34}$	.	.	.	.	.	1	.
$112_1 = \chi_{35}$	.	.	.	.	.	.	1
$112_2 = \chi_{36}$	4	4	1	2	1	.	.
$120_2 = \chi_{37}$	4	4	2	2	1	.	.
$168_2 = \chi_{38}$	.	.	1	.	1	.	1
$280_3 = \chi_{39}$	4	4	2	2	2	.	1
$448_1 = \chi_{40}$	8	8	1	8	3	2	.
$560_1 = \chi_{42}$	8	12	4	8	2	2	1

(Block 1:)	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7
$720_1 = \chi_{43}$	8	12	4	8	3	2	2

$$\begin{aligned} \varphi_1 &= 1_1 \\ \varphi_2 &= 6_1 \\ \varphi_3 &= 8_1 \\ \varphi_4 &= 14_1 \\ \varphi_5 &= 48_1 \\ \varphi_6 &= 64_1 \\ \varphi_7 &= 112_1 \end{aligned}$$

Block 2:	φ_8
$512_1 = \chi_{30}$	1
$512_2 = \chi_{41}$	1

$$\varphi_8 = 512_1$$