

$G_2(3) \pmod{2}$

	blocks	defect	matrix
$G :$	1	6	18×7
	2	0	$64_1 = \chi_3, \varphi_3$
	$3 = \bar{2}$	0	$64_2 = \chi_4, \varphi_4$
	4	0	$448_1 = \chi_{15}, \varphi_{10}$
	5	0	$448_2 = \chi_{16}, \varphi_{11}$

	blocks	defect	matrix
	6	0	$832_1 = \chi_{23}, \varphi_{12}$
$3.G :$	7	6	10×3
	$8 = 7^*$		
	9	0	$1728_1 = \chi_{34}, \varphi_{16}$
	$10 = 9^*$		

Block 1:	φ_1	φ_2	φ_5	φ_6	φ_7	φ_8	φ_9
$1_1 = \chi_1$	1	.	.	.	.	.	.
$14_1 = \chi_2$	.	1	.	.	.	.	.
$78_1 = \chi_5$	.	.	1	.	.	.	.
$91_1 = \chi_6$	1	.	.	1	.	.	.
$91_2 = \chi_7$	1	.	.	.	1	.	.
$91_3 = \chi_8$	1	.	.	.	.	1	.
$104_1 = \chi_9$	.	1	.	1	.	.	.
$168_1 = \chi_{10}$	.	.	1	1	.	.	.
$182_1 = \chi_{11}$	.	1	1	.	.	1	.
$182_2 = \chi_{12}$	.	1	1	.	1	.	.
$273_1 = \chi_{13}$	1	1	1	1	.	1	.
$273_2 = \chi_{14}$	1	1	1	1	1	.	.
$546_1 = \chi_{17}$	.	.	1	.	1	.	1
$546_2 = \chi_{18}$	.	.	1	.	.	1	1
$728_1 = \chi_{19}$	.	1	2	.	.	2	1
$728_2 = \chi_{20}$	.	1	2	.	2	.	1
$729_1 = \chi_{21}$	1	1	2	.	1	1	1
$819_1 = \chi_{22}$	1	1	2	1	1	1	1

$$\begin{aligned}
 \varphi_1 &= 1_1 \\
 \varphi_2 &= 14_1 \\
 \varphi_5 &= 78_1 \\
 \varphi_6 &= 90_1 \\
 \varphi_7 &= 90_2 \\
 \varphi_8 &= 90_3 \\
 \varphi_9 &= 378_1
 \end{aligned}$$

Blocks 7, 8:	φ_{13}	φ_{14}	φ_{15}
$27_1 = \chi_{24}$	1	.	.
$27_3 = \chi_{25}$	1	.	.
$189_1 = \chi_{26}$	1	.	1
$189_3 = \chi_{27}$	1	1	.
$351_1 = \chi_{28}$	1	1	1
$351_3 = \chi_{29}$	1	1	1
$351_5 = \chi_{30}$	1	1	1
$378_1 = \chi_{31}$	2	1	1
$378_3 = \chi_{32}$	2	1	1
$729_2 = \chi_{33}$	3	2	2

$$\begin{aligned}
 \varphi_{13} &= 27_1 \\
 \varphi_{14} &= 162_1 \\
 \varphi_{15} &= 162_3
 \end{aligned}$$