

$He \pmod{3}$

	blocks	defect	matrix
$G :$	1	3	13×7
	2	2	9×7
	3	1	3×2
	$4 = \bar{3}$	1	3×2
	5	1	3×2
	6	0	$11475_1 = \chi_{23}, \varphi_{20}$
	$7 = \bar{6}$	0	$11475_2 = \chi_{24}, \varphi_{21}$

Block 1:	φ_1	φ_6	φ_9	φ_{13}	φ_{14}	φ_{15}	φ_{19}	
$1_1 = \chi_1$	1	.	.	.	.	.	.	$\varphi_1 = 1_1$
$680_1 = \chi_6$	1	1	.	.	.	.	.	$\varphi_6 = 679_1$
$1275_1 = \chi_9$	.	.	1	.	.	.	.	$\varphi_9 = 1275_1$
$4352_1 = \chi_{14}$	.	1	.	1	.	.	.	$\varphi_{13} = 3673_1$
$6272_1 = \chi_{15}$	.	.	.	.	.	1	.	$\varphi_{14} = 6172_1$
$10880_1 = \chi_{22}$	1	.	.	.	.	.	1	$\varphi_{15} = 6272_1$
$11900_1 = \chi_{25}$	1	1	1	1	.	1	.	$\varphi_{19} = 10879_1$
$13720_1 = \chi_{26}$	1	.	1	.	1	1	.	
$17493_1 = \chi_{28}$	1	.	1	1	.	2	.	
$20825_1 = \chi_{29}$	1	.	.	1	.	1	1	
$21504_1 = \chi_{30}$	1	1	.	1	.	1	1	
$21504_2 = \chi_{31}$	1	1	.	1	.	1	1	
$23324_1 = \chi_{33}$	1	.	.	.	1	1	1	

Block 2:	φ_2	φ_3	φ_7	φ_8	φ_{10}	φ_{11}	φ_{12}	
$51_1 = \chi_2$	1	.	.	.	.	.	.	$\varphi_2 = 51_1$
$51_2 = \chi_3$	.	1	.	.	.	.	.	$\varphi_3 = 51_2$
$1029_1 = \chi_7$	.	.	1	.	.	.	.	$\varphi_7 = 1029_1$
$1029_2 = \chi_8$	.	.	.	1	.	.	.	$\varphi_8 = 1029_2$
$1275_2 = \chi_{10}$	.	.	.	.	1	.	.	$\varphi_{10} = 1275_2$
$1275_3 = \chi_{11}$	.	.	.	.	.	1	.	$\varphi_{11} = 1275_3$
$1920_1 = \chi_{12}$	.	.	.	.	.	.	1	$\varphi_{12} = 1920_1$
$4080_1 = \chi_{13}$	1	1	1	1	.	.	1	
$6528_1 = \chi_{16}$	.	.	1	1	1	1	1	

Block 3:	φ_4	φ_{16}
$153_1 = \chi_4$	1	.
$7497_1 = \chi_{17}$	.	1
$7650_2 = \chi_{20}$	1	1

$$\begin{aligned}\varphi_4 &= 153_1 \\ \varphi_{16} &= 7497_1\end{aligned}$$

Block 4:	φ_5	φ_{17}
$153_2 = \chi_5$	1	.
$7497_2 = \chi_{18}$	.	1
$7650_3 = \chi_{21}$	1	1

$$\begin{aligned}\varphi_5 &= 153_2 \\ \varphi_{17} &= 7497_2\end{aligned}$$

Block 5:	φ_{18}	φ_{22}
$7650_1 = \chi_{19}$	1	.
$14400_1 = \chi_{27}$	.	1
$22050_1 = \chi_{32}$	1	1

$$\begin{aligned}\varphi_{18} &= 7650_1 \\ \varphi_{22} &= 14400_1\end{aligned}$$