

$$S_7 \pmod{2}$$

	blocks	defect	matrix
$2.G :$	1	5	15×3
	2	4	8×2
$6.G :$	3	4	8×2
	4	1	2×1
	5	1	2×1

Block 1:	$\varphi_{1,0}$	$\varphi_{5,0}$	$\varphi_{6,0}$	
$1_1 = \chi_{1,0}$	1	.	.	
$1_2 = \chi_{1,1}$	1	.	.	
$14_1 = \chi_{5,0}$	.	1	.	
$14_2 = \chi_{5,1}$	.	1	.	
$15_1 = \chi_{7,0}$	1	1	.	
$15_2 = \chi_{7,1}$	1	1	.	$\varphi_{1,0} = 1_1$
$21_1 = \chi_{8,0}$	1	.	1	$\varphi_{5,0} = 14_1$
$21_2 = \chi_{8,1}$	1	.	1	$\varphi_{6,0} = 20_1$
$35_1 = \chi_{9,0}$	1	1	1	
$35_2 = \chi_{9,1}$	1	1	1	
$28_1 = \chi_{12+}$	.	2	.	
$20_2 = \chi_{14,0}$	.	.	1	
$20_3 = \chi_{14,1}$	.	.	1	
$36_1 = \chi_{16,0}$	2	1	1	
$36_2 = \chi_{16,1}$	2	1	1	

Block 2:	φ_{2+}	$\varphi_{4,0}$	
$6_1 = \chi_{2,0}$	.	1	
$6_2 = \chi_{2,1}$	.	1	
$20_1 = \chi_{3+}$	1	2	$\varphi_{2+} = 8_1$
$14_3 = \chi_{6,0}$	1	1	$\varphi_{4,0} = 6_1$
$14_4 = \chi_{6,1}$	1	1	
$8_1 = \chi_{10+}$	1	.	
$20_4 = \chi_{15,0}$	1	2	
$20_5 = \chi_{15,1}$	1	2	

Block 3:	φ_{7+}	φ_{8+}	
$12_1 = \chi_{17+}$	1	.	
$30_1 = \chi_{18+}$	.	1	
$30_2 = \chi_{19+}$	.	1	
$42_1 = \chi_{20+}$	1	1	$\varphi_{7+} = 12_1$
$42_2 = \chi_{21+}$	1	1	$\varphi_{8+} = 30_1$
$12_2 = \chi_{24+}$	1	.	
$12_3 = \chi_{25+}$	1	.	
$72_1 = \chi_{28+}$	1	2	

Blocks 4, 5:	φ_{9+}	
$48_1 = \chi_{22+}$	1	$\varphi_{9+} = 48_1$
$48_3 = \chi_{26+}$	1	

Block 5:	φ_{10+}	
$48_2 = \chi_{23+}$	1	$\varphi_{10+} = 48_2$
$48_4 = \chi_{27+}$	1	