# $Sz(32).5 \quad (\mathbf{mod}\ 41)$

| | blocks | defect | matrix |
|---|---|---|---|
| $G:$ | 1 | 1 | $22 \times 20$ |
| | 2 | 0 | $5125_1 = \chi_{15+}, \varphi_{5+}$ |
| | 3 | 0 | $5125_2 = \chi_{20+}, \varphi_{10+}$ |
| | 4 | 0 | $5125_3 = \chi_{25+}, \varphi_{15+}$ |
| | 5 | 0 | $1271_1 = \chi_{30,0}, \varphi_{20,0}$ |

| | blocks | defect | matrix |
|---|---|---|---|
| | 6 | 0 | $1271_2 = \chi_{30,1}, \varphi_{20,1}$ |
| | 7 | 0 | $1271_3 = \chi_{30,2}, \varphi_{20,2}$ |
| | $8 = \overline{7}$ | 0 | $1271_4 = \chi_{30,3}, \varphi_{20,3}$ |
| | $9 = \overline{6}$ | 0 | $1271_5 = \chi_{30,4}, \varphi_{20,4}$ |
| | 10 | 0 | $6355_1 = \chi_{31+}, \varphi_{21+}$ |

| **Block 1:** | $\varphi_{1,0}$ | $\varphi_{1,1}$ | $\varphi_{1,2}$ | $\varphi_{1,3}$ | $\varphi_{1,4}$ | $\varphi_{2,0}$ | $\varphi_{2,1}$ | $\varphi_{2,2}$ | $\varphi_{2,3}$ | $\varphi_{2,4}$ | $\varphi_{3,0}$ | $\varphi_{3,1}$ | $\varphi_{3,2}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $1_1 = \chi_{1,0}$ | 1 | . | . | . | . | . | . | . | . | . | . | . | . |
| $1_2 = \chi_{1,1}$ | . | 1 | . | . | . | . | . | . | . | . | . | . | . |
| $1_3 = \chi_{1,2}$ | . | . | 1 | . | . | . | . | . | . | . | . | . | . |
| $1_4 = \chi_{1,3}$ | . | . | . | 1 | . | . | . | . | . | . | . | . | . |
| $1_5 = \chi_{1,4}$ | . | . | . | . | 1 | . | . | . | . | . | . | . | . |
| $124_1 = \chi_{2,0}$ | . | . | . | . | . | 1 | . | . | . | . | . | . | . |
| $124_2 = \chi_{2,1}$ | . | . | . | . | . | . | 1 | . | . | . | . | . | . |
| $124_3 = \chi_{2,2}$ | . | . | . | . | . | . | . | 1 | . | . | . | . | . |
| $124_4 = \chi_{2,3}$ | . | . | . | . | . | . | . | . | 1 | . | . | . | . |
| $124_5 = \chi_{2,4}$ | . | . | . | . | . | . | . | . | . | 1 | . | . | . |
| $124_6 = \chi_{3,0}$ | . | . | . | . | . | . | . | . | . | . | 1 | . | . |
| $124_7 = \chi_{3,1}$ | . | . | . | . | . | . | . | . | . | . | . | 1 | . |
| $124_8 = \chi_{3,2}$ | . | . | . | . | . | . | . | . | . | . | . | . | 1 |
| $124_9 = \chi_{3,3}$ | . | . | . | . | . | . | . | . | . | . | . | . | . |
| $124_{10} = \chi_{3,4}$ | . | . | . | . | . | . | . | . | . | . | . | . | . |
| $3875_1 = \chi_{4+}$ | . | . | . | . | . | . | . | . | . | . | . | . | . |
| $3875_2 = \chi_{9+}$ | . | . | . | . | . | . | . | . | . | . | . | . | . |
| $1024_1 = \chi_{14,0}$ | 1 | . | . | . | . | . | 1 | . | . | . | . | . | . |
| $1024_2 = \chi_{14,1}$ | . | 1 | . | . | . | . | . | 1 | . | . | 1 | . | . |
| $1024_3 = \chi_{14,2}$ | . | . | 1 | . | . | . | . | . | 1 | . | . | 1 | . |
| $1024_4 = \chi_{14,3}$ | . | . | . | 1 | . | . | . | . | . | 1 | . | . | 1 |
| $1024_5 = \chi_{14,4}$ | . | . | . | . | 1 | 1 | . | . | . | . | . | . | . |

| (**Block 1:**) | $\varphi_{3,3}$ | $\varphi_{3,4}$ | $\varphi_{4,0}$ | $\varphi_{4,1}$ | $\varphi_{4,2}$ | $\varphi_{4,3}$ | $\varphi_{4,4}$ |
|---|---|---|---|---|---|---|---|
| $1_1 = \chi_{1,0}$ | . | . | . | . | . | . | . |
| $1_2 = \chi_{1,1}$ | . | . | . | . | . | . | . |
| $1_3 = \chi_{1,2}$ | . | . | . | . | . | . | . |
| $1_4 = \chi_{1,3}$ | . | . | . | . | . | . | . |
| $1_5 = \chi_{1,4}$ | . | . | . | . | . | . | . |
| $124_1 = \chi_{2,0}$ | . | . | . | . | . | . | . |
| $124_2 = \chi_{2,1}$ | . | . | . | . | . | . | . |
| $124_3 = \chi_{2,2}$ | . | . | . | . | . | . | . |
| $124_4 = \chi_{2,3}$ | . | . | . | . | . | . | . |
| $124_5 = \chi_{2,4}$ | . | . | . | . | . | . | . |
| $124_6 = \chi_{3,0}$ | . | . | . | . | . | . | . |
| $124_7 = \chi_{3,1}$ | . | . | . | . | . | . | . |
| $124_8 = \chi_{3,2}$ | . | . | . | . | . | . | . |
| $124_9 = \chi_{3,3}$ | 1 | . | . | . | . | . | . |
| $124_{10} = \chi_{3,4}$ | . | 1 | . | . | . | . | . |
| $3875_1 = \chi_{4+}$ | . | . | 1 | 1 | 1 | 1 | 1 |
| $3875_2 = \chi_{9+}$ | . | . | 1 | 1 | 1 | 1 | 1 |
| $1024_1 = \chi_{14,0}$ | . | 1 | 1 | . | . | . | . |
| $1024_2 = \chi_{14,1}$ | . | . | . | 1 | . | . | . |
| $1024_3 = \chi_{14,2}$ | . | . | . | . | 1 | . | . |
| $1024_4 = \chi_{14,3}$ | . | . | . | . | . | 1 | . |
| $1024_5 = \chi_{14,4}$ | 1 | . | . | . | . | . | 1 |

$\varphi_{1,0} = 1_1$
$\varphi_{1,1} = 1_2$
$\varphi_{1,2} = 1_3$
$\varphi_{1,3} = 1_4$
$\varphi_{1,4} = 1_5$
$\varphi_{2,0} = 124_1$
$\varphi_{2,1} = 124_2$
$\varphi_{2,2} = 124_3$
$\varphi_{2,3} = 124_4$
$\varphi_{2,4} = 124_5$
$\varphi_{3,0} = 124_6$
$\varphi_{3,1} = 124_7$
$\varphi_{3,2} = 124_8$
$\varphi_{3,3} = 124_9$
$\varphi_{3,4} = 124_{10}$
$\varphi_{4,0} = 775_1$
$\varphi_{4,1} = 775_2$
$\varphi_{4,2} = 775_3$
$\varphi_{4,3} = 775_4$
$\varphi_{4,4} = 775_5$