

$Co_2 \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	7×6
	2	1	7×6
	3	1	7×6
	4	1	5×3
	5	0	$1771_1 = \chi_5, \varphi_5$
	6	0	$4025_1 = \chi_8, \varphi_8$
	7	0	$7084_1 = \chi_9, \varphi_9$
	8	0	$9625_1 = \chi_{10}, \varphi_{10}$
	$9 = \overline{8}$	0	$9625_2 = \chi_{11}, \varphi_{11}$
	10	0	$10395_1 = \chi_{12}, \varphi_{12}$
	$11 = \overline{10}$	0	$10395_2 = \chi_{13}, \varphi_{13}$
	12	0	$31878_1 = \chi_{18}, \varphi_{18}$
	13	0	$37422_1 = \chi_{19}, \varphi_{19}$
	14	0	$44275_1 = \chi_{20}, \varphi_{20}$
	15	0	$177100_1 = \chi_{26}, \varphi_{25}$
	16	0	$212520_1 = \chi_{28}, \varphi_{26}$
	17	0	$221375_1 = \chi_{29}, \varphi_{27}$
	18	0	$226688_1 = \chi_{30}, \varphi_{28}$
	19	0	$239085_1 = \chi_{31}, \varphi_{30}$
	$20 = \overline{19}$	0	$239085_2 = \chi_{32}, \varphi_{31}$
	21	0	$312984_1 = \chi_{36}, \varphi_{34}$
	22	0	$398475_1 = \chi_{38}, \varphi_{35}$
	23	0	$398475_2 = \chi_{39}, \varphi_{36}$
	24	0	$430353_1 = \chi_{40}, \varphi_{37}$
	25	0	$442750_1 = \chi_{41}, \varphi_{38}$
	26	0	$462000_1 = \chi_{42}, \varphi_{39}$
	27	0	$467775_1 = \chi_{43}, \varphi_{40}$
	28	0	$637560_1 = \chi_{45}, \varphi_{43}$
	29	0	$664125_1 = \chi_{46}, \varphi_{44}$
	30	0	$664125_2 = \chi_{47}, \varphi_{45}$
	31	0	$664125_3 = \chi_{48}, \varphi_{46}$
	32	0	$1288000_1 = \chi_{50}, \varphi_{47}$
	33	0	$1291059_1 = \chi_{51}, \varphi_{48}$
	34	0	$1771000_1 = \chi_{52}, \varphi_{50}$
	35	0	$1771000_2 = \chi_{53}, \varphi_{51}$
	36	0	$1835008_1 = \chi_{54}, \varphi_{53}$
	37	0	$1992375_1 = \chi_{56}, \varphi_{54}$
	38	0	$2040192_1 = \chi_{58}, \varphi_{55}$

Block 1:	φ_1	φ_{14}	φ_{29}	φ_{41}	φ_{42}	φ_{49}
$1_1 = \chi_1$	1	.	.	.	.	.
$12650_1 = \chi_{14}$	.	1	.	.	.	.
$245916_1 = \chi_{33}$	.	1	1	.	.	.
$558900_1 = \chi_{44}$	1	.	.	1	.	.
$853875_1 = \chi_{49}$	.	.	1	.	1	.
$1943040_1 = \chi_{55}$	.	.	.	1	.	1
$2004750_1 = \chi_{57}$	.	.	.	.	1	1

$$\begin{aligned} \varphi_1 &= 1_1 \\ \varphi_{14} &= 12650_1 \\ \varphi_{29} &= 233266_1 \\ \varphi_{41} &= 558899_1 \\ \varphi_{42} &= 620609_1 \\ \varphi_{49} &= 1384141_1 \end{aligned}$$

Block 2:	φ_2	φ_7	φ_{21}	φ_{32}	φ_{33}	φ_{52}
$23_1 = \chi_2$	1	.	.	.	.	.
$2277_1 = \chi_7$	.	1	.	.	.	.
$63250_1 = \chi_{21}$	1	.	1	.	.	.
$284625_1 = \chi_{35}$	.	1	.	1	.	.
$368874_1 = \chi_{37}$	.	.	1	.	1	.
$2072576_1 = \chi_{59}$	.	.	.	1	.	1
$2095875_1 = \chi_{60}$	.	.	.	.	1	1

$$\begin{aligned} \varphi_2 &= 23_1 \\ \varphi_7 &= 2277_1 \\ \varphi_{21} &= 63227_1 \\ \varphi_{32} &= 282348_1 \\ \varphi_{33} &= 305647_1 \\ \varphi_{52} &= 1790228_1 \end{aligned}$$

Block 3:	φ_3	φ_6	φ_{16}	φ_{17}	φ_{23}	φ_{24}
$253_1 = \chi_3$	1	.	.	.	.	.
$2024_1 = \chi_6$	.	1	.	.	.	.
$31625_1 = \chi_{16}$	1	.	.	1	.	.
$31625_2 = \chi_{17}$	.	1	1	.	.	.
$129536_1 = \chi_{25}$	.	.	.	1	1	.
$184437_1 = \chi_{27}$	.	.	1	.	.	1
$253000_1 = \chi_{34}$	.	.	.	.	1	1

$$\begin{aligned} \varphi_3 &= 253_1 \\ \varphi_6 &= 2024_1 \\ \varphi_{16} &= 29601_1 \\ \varphi_{17} &= 31372_1 \\ \varphi_{23} &= 98164_1 \\ \varphi_{24} &= 154836_1 \end{aligned}$$

Block 4:	φ_4	φ_{15}	φ_{22}
$275_1 = \chi_4$	1	.	.
$23000_1 = \chi_{15}$	1	1	.
$91125_1 = \chi_{22}$	.	.	1
$91125_2 = \chi_{23}$	.	.	1
$113850_1 = \chi_{24}$	.	1	1

$$\begin{aligned} \varphi_4 &= 275_1 \\ \varphi_{15} &= 22725_1 \\ \varphi_{22} &= 91125_1 \end{aligned}$$