

Hexagonal

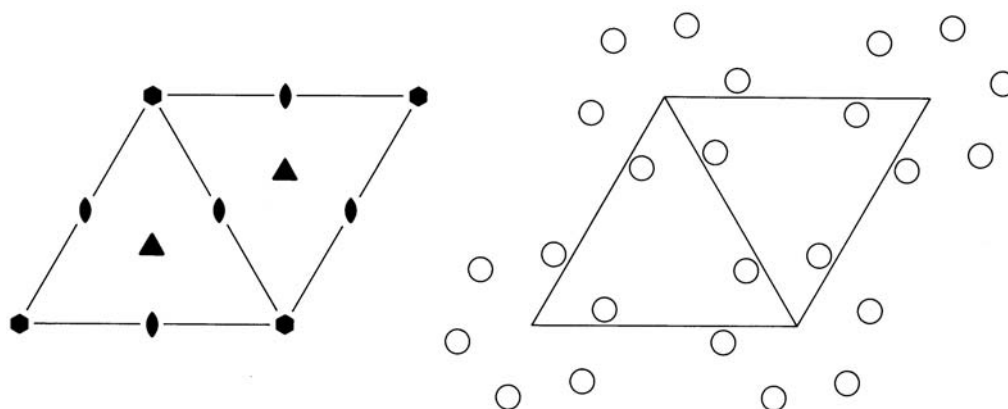
6

p6

Patterson symmetry *p6*

p6

No. 16



Origin at 6

Asymmetric unit $0 \leq x \leq \frac{2}{3}; 0 \leq y \leq \frac{1}{2}; x \leq (1+y)/2; y \leq \min(1-x, x)$

Vertices $0,0 \quad \frac{1}{2},0 \quad \frac{2}{3},\frac{1}{3} \quad \frac{1}{2},\frac{1}{2}$

Symmetry operations

- | | | |
|-----------|------------------------|------------------------|
| (1) 1 | (2) 3 ⁺ 0,0 | (3) 3 ⁻ 0,0 |
| (4) 2 0,0 | (5) 6 ⁻ 0,0 | (6) 6 ⁺ 0,0 |

Generators selected (1); *t*(1,0); *t*(0,1); (2); (4)

Positions

Multiplicity,
Wyckoff letter,
Site symmetry

Coordinates

Reflection conditions

6	<i>d</i>	1	(1) <i>x</i> , <i>y</i>	(2) \bar{y} , <i>x</i> - <i>y</i>	(3) \bar{x} + <i>y</i> , \bar{x}
			(4) \bar{x} , \bar{y}	(5) <i>y</i> , \bar{x} + <i>y</i>	(6) <i>x</i> - <i>y</i> , <i>x</i>

General:
no conditions

Special: no extra conditions

3	<i>c</i>	2..	$\frac{1}{2},0$	$0,\frac{1}{2}$	$\frac{1}{2},\frac{1}{2}$
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2	<i>b</i>	3..	$\frac{1}{3},\frac{2}{3}$	$\frac{2}{3},\frac{1}{3}$	
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1	<i>a</i>	6..	0,0		
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