| $Cd_{0.57}Mn_{0.43}S$ | *hP*6 | (186) $P6_3mc$ – $b^3$ |
|---|---|---|

**$Cd_{0.57}Mn_{0.43}S$** [1]
Structural features: Close-packed S layers in h stacking; (Cd,Mn) in tetrahedral voids (stacking sequence BbCc, distinct positions for Cd and Mn). $(Cd,Mn)S_4$ tetrahedra share vertices to form a 3D-framework. Variant of ZnO with site splitting.

Rodic D. et al. (1996) [1]
$Cd_{0.57}Mn_{0.43}S$
$a = 0.40683$, $c = 0.66007$ nm, $c/a = 1.622$, $V = 0.0946$ nm$^3$, $Z = 2$

| site | Wyck. | sym. | *x* | *y* | *z* | occ. | atomic environment |
|---|---|---|---|---|---|---|---|
| Mn1 | 2*b* | 3*m*. | $^1/_3$ | $^2/_3$ | 0.0 | 0.43 | |
| Cd2 | 2*b* | 3*m*. | $^1/_3$ | $^2/_3$ | 0.018 | 0.57 | |
| S3 | 2*b* | 3*m*. | $^1/_3$ | $^2/_3$ | 0.393 | | |

Transformation from published data: -*x*,-*y*,-*z*; origin shift 0 0 0.107
Experimental: powder, diffractometer, X-rays, $R_B = 0.043$

Remarks: Short interatomic distances for partly occupied site(s).

References: [1] Rodic D., Spasojevic V., Bajorek A., Onnerud P. (1996), J. Magn. Magn. Mater. 152, 159-164.