

data\_kss\_cry2\_p6

\_audit\_creation\_method SHELXL-97

\_chemical\_name\_systematic

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;

\_chemical\_name\_common ?

\_chemical\_melting\_point ?

\_chemical\_formula\_moiety ?

\_chemical\_formula\_sum

'Al2 K1.97 O8 Si2'

\_chemical\_formula\_weight 315.17

loop\_

\_atom\_type\_symbol

\_atom\_type\_description

\_atom\_type\_scat\_dispersion\_real

\_atom\_type\_scat\_dispersion\_imag

\_atom\_type\_scat\_source

'O' 'O' 0.0106 0.0060

'International Tables Vol C Tables 4.2.6.8 and 6.1.1.4'

'Al' 'Al' 0.0645 0.0514

'International Tables Vol C Tables 4.2.6.8 and 6.1.1.4'

'Si' 'Si' 0.0817 0.0704

'International Tables Vol C Tables 4.2.6.8 and 6.1.1.4'

'K' 'K' 0.2009 0.2494

'International Tables Vol C Tables 4.2.6.8 and 6.1.1.4'

\_symmetry\_cell\_setting ?

\_symmetry\_space\_group\_name\_H-M ?

loop\_

\_symmetry\_equiv\_pos\_as\_xyz

'x, y, z'

'-y, x-y, z'

'y, x, z+1/2'

'-x+y, -x, z'

'-x, -x+y, z+1/2'

'x-y, -y, z+1/2'

\_cell\_length\_a 5.048(3)

\_cell\_length\_b 5.048(3)

\_cell\_length\_c 8.322(6)

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\_cell\_angle\_beta 90.00

\_cell\_angle\_gamma 120.00

\_cell\_volume 183.7(2)

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\_exptl\_crystal\_density\_diffrn 2.850  
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\_diffrn\_reflns\_limit\_k\_max 8  
\_diffrn\_reflns\_limit\_l\_min -13  
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\_reflns\_number\_gt 171  
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\_computing\_cell\_refinement ?  
\_computing\_data\_reduction ?

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_computing_structure_refinement 'SHELXL-97 (Sheldrick, 1997)'
_computing_molecular_graphics   ?
_computing_publication_material ?

_refine_special_details
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Refinement of F^2 against ALL reflections. The weighted R-factor wR and
goodness of fit S are based on F^2, conventional R-factors R are based
on F, with F set to zero for negative F^2. The threshold expression of
F^2 > 2sigma(F^2) is used only for calculating R-factors(gt) etc. and is
not relevant to the choice of reflections for refinement. R-factors based
on F^2 are statistically about twice as large as those based on F, and R-
factors based on ALL data will be even larger.
;

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_refine_ls_matrix_type      full
_refine_ls_weighting_scheme calc
_refine_ls_weighting_details
'calc w=1/[s^2^(Fo^2)+(0.0100P)^2+0.0000P] where P=(Fo^2+2Fc^2)/3'
_atom_sites_solution_primary direct
_atom_sites_solution_secondary difmap
_atom_sites_solution_hydrogens geom
_refine_ls_hydrogen_treatment mixed
_refine_ls_extinction_method SHELXL
_refine_ls_extinction_coef   0.096(9)
_refine_ls_extinction_expression
'Fc^*^=kFc[1+0.001xFc^2\l^3/sin(2\q)]^-1/4^'
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'Flack H D (1983), Acta Cryst. A39, 876-881'
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_refine_ls_number_reflns     457
_refine_ls_number_parameters 15
_refine_ls_number_restraints  8
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_refine_ls_R_factor_gt        0.1185
_refine_ls_wR_factor_ref     0.1586
_refine_ls_wR_factor_gt      0.1420
_refine_ls_goodness_of_fit_ref 1.822
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_refine_ls_shift/su_mean      0.000

loop_
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_atom_site_fract_y
_atom_site_fract_z
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_atom_site_adp_type
_atom_site_occupancy
_atom_site_symmetry_multiplicity

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\_geom\_special\_details  
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All esds (except the esd in the dihedral angle between two l.s. planes)  
are estimated using the full covariance matrix. The cell esds are taken  
into account individually in the estimation of esds in distances, angles  
and torsion angles; correlations between esds in cell parameters are only  
used when they are defined by crystal symmetry. An approximate (isotropic)  
treatment of cell esds is used for estimating esds involving l.s. planes.

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K O2 3.040(11) 3\_544 ?  
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