

data-nitrile13

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'H' 'H' 0.0000 0.0000
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'N' 'N' 0.0061 0.0033
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_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 $F^2 > 2\sigma(F^2)$ 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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C7 C -0.7432(2) -0.42062(15) -0.24242(9) 0.0274(3) Uani 1 1 d . . .
H7A H -0.8538 -0.4251 -0.2833 0.033 Uiso 1 1 calc R . .
N2 N -0.22074(19) -0.48035(14) -0.31889(8) 0.0323(3) Uani 1 1 d . .
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C5 C -0.9497(2) -0.54425(16) -0.13726(9) 0.0329(3) Uani 1 1 d . . .
O1 O -1.05466(18) -0.63839(13) -0.13762(7) 0.0417(3) Uani 1 1 d . .
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C8 C -0.5570(2) -0.41565(14) -0.29469(8) 0.0258(3) Uani 1 1 d . . .
C10 C -0.3890(2) -0.35257(17) -0.42251(10) 0.0324(3) Uani 1 1 d . .
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H10A H -0.3844 -0.3092 -0.4749 0.039 Uiso 1 1 calc R . .
C6 C -0.7577(2) -0.54123(15) -0.18616(10) 0.0324(3) Uani 1 1 d . . .
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H6B H -0.6476 -0.5424 -0.1460 0.039 Uiso 1 1 calc R . .
C11 C -0.2303(2) -0.42216(15) -0.39301(9) 0.0286(3) Uani 1 1 d . . .
C12 C -0.3844(2) -0.47562(16) -0.27089(10) 0.0311(3) Uani 1 1 d . .
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C3 C -0.9719(3) -0.30318(16) -0.14106(11) 0.0363(4) Uani 1 1 d . . .
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H3B H -0.9827 -0.2281 -0.1038 0.044 Uiso 1 1 calc R . .
C9 C -0.5538(2) -0.34932(16) -0.37217(10) 0.0314(3) Uani 1 1 d . . .
H9A H -0.6648 -0.3025 -0.3897 0.038 Uiso 1 1 calc R . .
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H4A H -0.9072 -0.4201 -0.0383 0.047 Uiso 1 1 calc R . .
H4B H -1.1305 -0.4299 -0.0663 0.047 Uiso 1 1 calc R . .
C2 C -0.7756(2) -0.29761(15) -0.18840(10) 0.0290(3) Uani 1 1 d . . .
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0.00199(18)
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O1 0.0451(7) 0.0405(7) 0.0394(6) 0.0040(5) 0.0019(5) -0.0150(6)
C8 0.0287(7) 0.0246(7) 0.0241(7) -0.0028(6) -0.0020(5) -0.0019(6)
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C12 0.0298(7) 0.0347(9) 0.0287(7) 0.0040(7) 0.0006(6) 0.0026(6)
C1 0.0404(9) 0.0308(9) 0.0344(9) -0.0052(7) 0.0024(8) -0.0016(7)
N1 0.0477(10) 0.0599(11) 0.0519(10) -0.0182(8) -0.0085(9) -
0.0032(9)
C3 0.0335(8) 0.0332(8) 0.0423(9) -0.0046(7) 0.0054(7) 0.0040(7)
C9 0.0303(7) 0.0337(8) 0.0301(8) 0.0044(7) -0.0044(6) 0.0033(7)
C4 0.0404(9) 0.0407(9) 0.0357(8) -0.0018(7) 0.0099(7) -0.0037(8)
C2 0.0312(8) 0.0241(8) 0.0317(8) -0.0001(6) 0.0003(7) 0.0008(6)

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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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C7 C2 1.553(2) . ?

N2 C11 1.315(2) . ?

N2 C12 1.346(2) . ?

C5 O1 1.213(2) . ?

C5 C4 1.500(2) . ?

C5 C6 1.515(2) . ?

C8 C12 1.382(2) . ?

C8 C9 1.400(2) . ?

C10 C9 1.373(2) . ?

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O1 C5 C4 123.38(15) . . ?

O1 C5 C6 121.45(15) . . ?

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N2 C11 C10 125.31(14) . . ?

N2 C11 Cl1 115.61(12) . . ?
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 N1 C1 C2 C3 167(7) ?
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_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 $F^2 > 2\sigma(F^2)$ 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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Cl1S	Cl 1.04632(16) 0.8863(3) 0.96389(15) 0.1029(8) Uani 1 1 d . . .
C1S	C 1.1220(7) 1.0720(13) 0.9515(6) 0.104(3) Uani 1 1 d . . .
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H1SB	H 1.0879 1.1842 0.9558 0.124 Uiso 1 1 calc R . .
O2	O 0.76358(18) 0.8005(4) 0.51663(17) 0.0314(5) Uani 1 1 d . . .
N3	N 0.8969(2) 0.6283(4) 0.5112(2) 0.0285(6) Uani 1 1 d . . .
H3A	H 0.9018 0.6912 0.4646 0.034 Uiso 1 1 calc R . .
C5	C 0.8168(2) 0.6534(5) 0.5546(2) 0.0265(7) Uani 1 1 d . . .
O1	O 1.0376(2) 0.4826(4) 0.5240(2) 0.0411(7) Uani 1 1 d . . .
O5	O 0.8798(2) 1.1472(4) 0.8353(2) 0.0425(7) Uani 1 1 d . . .
O4	O 0.9550(2) 1.0281(4) 0.7372(2) 0.0389(6) Uani 1 1 d . . .
C2	C 0.9318(3) 0.3999(5) 0.6201(3) 0.0319(8) Uani 1 1 d . . .
H2A	H 0.9776 0.3028 0.6434 0.038 Uiso 1 1 calc R . .

C28 C 1.1954(3) 0.6109(6) 0.8625(3) 0.0384(9) Uani 1 1 d . . .
 O3 O 0.7257(2) 0.6628(5) 0.7138(2) 0.0453(7) Uani 1 1 d . . .
 C4 C 0.7619(3) 0.4764(5) 0.5460(3) 0.0327(8) Uani 1 1 d . . .
 H4A H 0.7314 0.4540 0.4829 0.039 Uiso 1 1 calc R . .
 H4B H 0.7122 0.4829 0.5801 0.039 Uiso 1 1 calc R . .
 C1 C 0.9626(2) 0.5040(5) 0.5467(2) 0.0284(7) Uani 1 1 d . . .
 N2 N 0.8120(2) 0.9103(5) 0.7597(2) 0.0316(7) Uani 1 1 d . . .
 C14 C 0.8896(3) 1.0262(5) 0.7730(3) 0.0331(8) Uani 1 1 d . . .
 C24 C 0.9237(3) 0.5339(5) 0.6962(2) 0.0289(7) Uani 1 1 d . . .
 H24A H 0.8874 0.4732 0.7353 0.035 Uiso 1 1 calc R . .
 C26 C 1.0836(3) 0.6970(6) 0.7312(3) 0.0347(8) Uani 1 1 d . . .
 H26A H 1.0658 0.7675 0.6792 0.042 Uiso 1 1 calc R . .
 C13 C 0.7961(3) 0.7520(5) 0.7097(2) 0.0297(7) Uani 1 1 d . . .
 N1 N 1.1368(3) 0.4951(6) 0.8873(2) 0.0481(10) Uani 1 1 d . . .
 C12 C 0.8648(2) 0.6987(5) 0.6540(2) 0.0252(6) Uani 1 1 d . . .
 H12A H 0.9092 0.7999 0.6540 0.030 Uiso 1 1 calc R . .
 C16 C 0.7434(3) 0.9702(6) 0.8121(3) 0.0351(8) Uani 1 1 d . . .
 H16A H 0.7222 0.8675 0.8436 0.042 Uiso 1 1 calc R . .
 C25 C 1.0207(3) 0.5765(5) 0.7530(2) 0.0299(7) Uani 1 1 d . . .
 C15 C 0.8055(3) 1.0954(7) 0.8786(3) 0.0425(9) Uani 1 1 d . . .
 H15A H 0.7693 1.2004 0.8904 0.051 Uiso 1 1 calc R . .
 H15B H 0.8316 1.0337 0.9353 0.051 Uiso 1 1 calc R . .
 C18 C 0.5881(3) 1.1201(7) 0.8051(3) 0.0409(9) Uani 1 1 d . . .
 C3 C 0.8312(3) 0.3229(6) 0.5823(3) 0.0365(8) Uani 1 1 d . . .
 H3B H 0.8332 0.2376 0.5340 0.044 Uiso 1 1 calc R . .
 H3C H 0.8094 0.2588 0.6298 0.044 Uiso 1 1 calc R . .
 C27 C 1.1745(3) 0.7144(6) 0.7870(3) 0.0397(9) Uani 1 1 d . . .
 H27A H 1.2194 0.7942 0.7730 0.048 Uiso 1 1 calc R . .
 C29 C 1.0511(3) 0.4827(6) 0.8335(3) 0.0406(9) Uani 1 1 d . . .
 H29A H 1.0074 0.4047 0.8508 0.049 Uiso 1 1 calc R . .
 C17 C 0.6579(3) 1.0632(8) 0.7509(3) 0.0446(10) Uani 1 1 d . . .
 H17A H 0.6795 1.1685 0.7227 0.054 Uiso 1 1 calc R . .
 H17B H 0.6270 0.9806 0.7033 0.054 Uiso 1 1 calc R . .
 C10 C 0.6841(3) 1.0649(7) 0.3988(3) 0.0461(11) Uani 1 1 d . . .
 H10A H 0.6714 1.1239 0.4520 0.055 Uiso 1 1 calc R . .
 H10B H 0.7473 1.1034 0.3928 0.055 Uiso 1 1 calc R . .
 C23 C 0.5318(3) 0.9955(8) 0.8358(3) 0.0506(11) Uani 1 1 d . . .
 H23A H 0.5357 0.8737 0.8211 0.061 Uiso 1 1 calc R . .
 C19 C 0.5786(4) 1.2964(7) 0.8276(3) 0.0498(11) Uani 1 1 d . . .
 H19A H 0.6157 1.3840 0.8075 0.060 Uiso 1 1 calc R . .

C8 C 0.5669(4) 0.7355(7) 0.4243(4) 0.0620(15) Uani 1 1 d . . .
 H8A H 0.5201 0.7745 0.3707 0.074 Uiso 1 1 calc R . .
 H8B H 0.5677 0.6040 0.4245 0.074 Uiso 1 1 calc R . .
 C22 C 0.4694(4) 1.0487(10) 0.8883(4) 0.0608(14) Uani 1 1 d . . .
 H22A H 0.4316 0.9625 0.9085 0.073 Uiso 1 1 calc R . .
 C20 C 0.5154(4) 1.3491(9) 0.8793(4) 0.0585(14) Uani 1 1 d . . .
 H20A H 0.5094 1.4711 0.8926 0.070 Uiso 1 1 calc R . .
 C21 C 0.4629(4) 1.2245(10) 0.9106(4) 0.0621(16) Uani 1 1 d . . .
 H21A H 0.4221 1.2591 0.9474 0.074 Uiso 1 1 calc R . .
 C6 C 0.7152(5) 0.6788(10) 0.3250(4) 0.0707(16) Uani 1 1 d . . .
 H6A H 0.6793 0.5760 0.3038 0.085 Uiso 1 1 calc R . .
 C7 C 0.7945(6) 0.7340(13) 0.2877(5) 0.092(2) Uani 1 1 d . . .
 H7A H 0.8019 0.6502 0.2413 0.138 Uiso 1 1 calc R . .
 H7B H 0.8522 0.7358 0.3347 0.138 Uiso 1 1 calc R . .
 H7C H 0.7824 0.8532 0.2620 0.138 Uiso 1 1 calc R . .
 C11 C 0.6110(4) 1.1292(9) 0.3168(4) 0.0723(19) Uani 1 1 d . . .
 H11A H 0.6142 1.2589 0.3126 0.108 Uiso 1 1 calc R . .
 H11B H 0.5479 1.0943 0.3224 0.108 Uiso 1 1 calc R . .
 H11C H 0.6242 1.0755 0.2632 0.108 Uiso 1 1 calc R . .
 C9 C 0.5356(5) 0.8010(9) 0.5071(7) 0.084(2) Uani 1 1 d . . .
 H9A H 0.4732 0.7527 0.5072 0.125 Uiso 1 1 calc R . .
 H9B H 0.5327 0.9311 0.5066 0.125 Uiso 1 1 calc R . .
 H9C H 0.5808 0.7611 0.5606 0.125 Uiso 1 1 calc R . .
 Cl3S Cl 1.2244(5) 1.0748(5) 1.0275(5) 0.336(5) Uani 1 1 d . . .

loop_

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 Si1 0.0355(6) 0.0453(6) 0.0300(5) -0.0012(5) -0.0024(4) 0.0077(5)
 Cl1 0.0339(5) 0.0830(9) 0.0537(7) -0.0156(6) -0.0096(4) 0.0019(6)
 Cl1S 0.0991(14) 0.1193(17) 0.0979(14) 0.0467(13) 0.0382(11)
 0.0406(13)
 C1S 0.140(8) 0.083(5) 0.080(5) -0.007(4) 0.007(5) 0.019(5)
 O2 0.0292(12) 0.0345(13) 0.0284(12) 0.0012(11) 0.0022(9)
 0.0070(11)

N3 0.0322(14) 0.0311(14) 0.0239(13) 0.0015(12) 0.0099(11) -
0.0015(12)
C5 0.0259(15) 0.0288(16) 0.0238(15) 0.0003(13) 0.0037(12)
0.0015(13)
O1 0.0385(15) 0.0389(15) 0.0498(17) -0.0023(13) 0.0180(13)
0.0069(12)
O5 0.0461(16) 0.0388(15) 0.0435(16) -0.0083(13) 0.0123(12) -
0.0039(13)
O4 0.0421(15) 0.0338(14) 0.0438(15) -0.0020(12) 0.0160(12) -
0.0076(12)
C2 0.0341(18) 0.0242(16) 0.0341(18) 0.0042(14) 0.0008(14)
0.0016(14)
C28 0.0244(16) 0.045(2) 0.041(2) -0.0128(18) -0.0030(14)
0.0034(16)
O3 0.0421(16) 0.0528(18) 0.0464(17) -0.0150(15) 0.0214(13) -
0.0145(14)
C4 0.0307(18) 0.0289(17) 0.0362(19) 0.0004(15) 0.0030(14) -
0.0047(14)
C1 0.0293(17) 0.0258(16) 0.0291(17) -0.0075(13) 0.0046(13)
0.0003(13)
N2 0.0309(15) 0.0363(16) 0.0291(15) -0.0028(13) 0.0097(12)
0.0006(13)
C14 0.0368(19) 0.0279(17) 0.0314(18) 0.0029(14) 0.0014(15) -
0.0026(15)
C24 0.0335(18) 0.0292(17) 0.0236(15) 0.0026(13) 0.0052(13)
0.0001(14)
C26 0.0315(18) 0.040(2) 0.0312(18) 0.0012(15) 0.0048(14)
0.0042(16)
C13 0.0261(16) 0.0365(18) 0.0267(16) -0.0013(14) 0.0064(12) -
0.0010(14)
N1 0.047(2) 0.057(2) 0.0329(18) 0.0033(17) -0.0069(15)
0.0055(18)
C12 0.0241(15) 0.0294(16) 0.0222(15) 0.0002(13) 0.0053(12) -
0.0029(13)
C16 0.0346(19) 0.042(2) 0.0292(18) -0.0006(16) 0.0082(14)
0.0046(16)
C25 0.0314(17) 0.0339(18) 0.0235(16) -0.0016(13) 0.0043(13)
0.0018(14)
C15 0.044(2) 0.051(2) 0.033(2) -0.0077(18) 0.0090(16) -0.0005(19)

C18 0.0311(18) 0.059(3) 0.0280(18) -0.0043(18) -0.0029(14)
 0.0065(19)
 C3 0.0363(19) 0.0273(16) 0.042(2) 0.0019(16) 0.0003(15) -
 0.0088(16)
 C27 0.0280(18) 0.045(2) 0.045(2) -0.0041(18) 0.0066(16) -
 0.0070(17)
 C29 0.038(2) 0.044(2) 0.035(2) 0.0090(17) -0.0022(15) -0.0072(17)
 C17 0.039(2) 0.062(3) 0.0313(19) -0.0049(19) 0.0054(15) 0.015(2)
 C10 0.035(2) 0.051(2) 0.044(2) 0.019(2) -0.0074(17) -0.0065(18)
 C23 0.040(2) 0.067(3) 0.041(2) -0.009(2) 0.0019(18) 0.007(2)
 C19 0.053(3) 0.052(3) 0.040(2) 0.009(2) 0.0012(18) 0.011(2)
 C8 0.044(3) 0.046(3) 0.081(4) 0.002(3) -0.017(3) -0.008(2)
 C22 0.039(2) 0.083(4) 0.060(3) 0.004(3) 0.009(2) 0.003(3)
 C20 0.049(3) 0.072(4) 0.050(3) -0.013(3) 0.002(2) 0.023(3)
 C21 0.039(2) 0.101(5) 0.047(3) -0.006(3) 0.010(2) 0.020(3)
 C6 0.078(4) 0.077(4) 0.054(3) -0.012(3) 0.008(3) -0.015(3)
 C7 0.110(6) 0.096(5) 0.069(4) 0.001(4) 0.019(4) -0.021(5)
 C11 0.067(3) 0.057(3) 0.072(4) 0.027(3) -0.028(3) -0.011(3)
 C9 0.061(4) 0.051(3) 0.150(7) -0.013(4) 0.048(4) -0.010(3)
 Cl3S 0.346(7) 0.0700(16) 0.428(9) 0.026(3) -0.250(7) -0.022(3)

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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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 Si1 O2 1.674(3) . ?
 Si1 C10 1.851(5) . ?

Si1 C8 1.866(6) . ?
Si1 C6 1.876(7) . ?
Cl1 C28 1.747(4) . ?
Cl1S C1S 1.800(11) . ?
C1S Cl3S 1.662(10) . ?
O2 C5 1.388(4) . ?
N3 C1 1.349(5) . ?
N3 C5 1.471(4) . ?
C5 C4 1.529(5) . ?
C5 C12 1.559(5) . ?
O1 C1 1.220(4) . ?
O5 C14 1.343(5) . ?
O5 C15 1.437(5) . ?
O4 C14 1.194(5) . ?
C2 C1 1.512(5) . ?
C2 C3 1.547(5) . ?
C2 C24 1.559(5) . ?
C28 N1 1.323(6) . ?
C28 C27 1.364(7) . ?
O3 C13 1.229(5) . ?
C4 C3 1.538(6) . ?
N2 C14 1.392(5) . ?
N2 C13 1.396(5) . ?
N2 C16 1.479(5) . ?
C24 C25 1.505(5) . ?
C24 C12 1.549(5) . ?
C26 C25 1.371(6) . ?
C26 C27 1.400(6) . ?
C13 C12 1.501(5) . ?
N1 C29 1.324(5) . ?
C16 C15 1.514(6) . ?
C16 C17 1.535(6) . ?
C25 C29 1.398(5) . ?
C18 C19 1.373(7) . ?
C18 C23 1.385(8) . ?
C18 C17 1.505(6) . ?
C10 C11 1.522(6) . ?
C23 C22 1.393(7) . ?
C19 C20 1.394(7) . ?
C8 C9 1.521(11) . ?

C22 C21 1.363(10) . ?

C20 C21 1.353(9) . ?

C6 C7 1.452(10) . ?

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O2 Si1 C10 101.97(18) . . ?

O2 Si1 C8 110.6(2) . . ?

C10 Si1 C8 110.7(2) . . ?

O2 Si1 C6 115.0(2) . . ?

C10 Si1 C6 115.9(3) . . ?

C8 Si1 C6 102.8(3) . . ?

Cl3S C1S Cl1S 113.6(6) . . ?

C5 O2 Si1 129.5(2) . . ?

C1 N3 C5 117.3(3) . . ?

O2 C5 N3 109.2(3) . . ?

O2 C5 C4 114.7(3) . . ?

N3 C5 C4 107.3(3) . . ?

O2 C5 C12 108.6(3) . . ?

N3 C5 C12 104.3(3) . . ?

C4 C5 C12 112.2(3) . . ?

C14 O5 C15 110.9(3) . . ?

C1 C2 C3 108.8(3) . . ?

C1 C2 C24 108.1(3) . . ?

C3 C2 C24 107.0(3) . . ?

N1 C28 C27 125.4(4) . . ?

N1 C28 Cl1 115.4(3) . . ?

C27 C28 Cl1 119.2(3) . . ?

C5 C4 C3 109.1(3) . . ?

O1 C1 N3 124.2(4) . . ?

O1 C1 C2 125.1(3) . . ?

N3 C1 C2 110.7(3) . . ?

C14 N2 C13 129.1(3) . . ?

C14 N2 C16 110.5(3) . . ?

C13 N2 C16 120.3(3) . . ?
O4 C14 O5 122.6(4) . . ?
O4 C14 N2 129.4(4) . . ?
O5 C14 N2 108.0(3) . . ?
C25 C24 C12 115.1(3) . . ?
C25 C24 C2 110.4(3) . . ?
C12 C24 C2 108.9(3) . . ?
C25 C26 C27 119.6(4) . . ?
O3 C13 N2 117.7(3) . . ?
O3 C13 C12 123.2(3) . . ?
N2 C13 C12 119.2(3) . . ?
C29 N1 C28 115.8(4) . . ?
C13 C12 C24 110.1(3) . . ?
C13 C12 C5 114.0(3) . . ?
C24 C12 C5 108.4(3) . . ?
N2 C16 C15 100.5(3) . . ?
N2 C16 C17 110.5(3) . . ?
C15 C16 C17 113.8(4) . . ?
C26 C25 C29 116.6(3) . . ?
C26 C25 C24 125.4(3) . . ?
C29 C25 C24 118.0(3) . . ?
O5 C15 C16 104.2(3) . . ?
C19 C18 C23 117.2(4) . . ?
C19 C18 C17 121.7(5) . . ?
C23 C18 C17 121.1(5) . . ?
C4 C3 C2 109.8(3) . . ?
C28 C27 C26 117.4(4) . . ?
N1 C29 C25 125.1(4) . . ?
C18 C17 C16 109.7(3) . . ?
C11 C10 Si1 115.0(4) . . ?
C18 C23 C22 120.8(5) . . ?
C18 C19 C20 121.9(5) . . ?
C9 C8 Si1 113.4(4) . . ?
C21 C22 C23 120.5(6) . . ?
C21 C20 C19 120.0(6) . . ?
C20 C21 C22 119.7(5) . . ?
C7 C6 Si1 117.8(5) . . ?

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 C10 Si1 O2 C5 -158.6(3) ?
 C8 Si1 O2 C5 83.6(4) ?
 C6 Si1 O2 C5 -32.3(4) ?
 Si1 O2 C5 N3 75.6(4) ?
 Si1 O2 C5 C4 -44.9(4) ?
 Si1 O2 C5 C12 -171.3(2) ?
 C1 N3 C5 O2 172.5(3) ?
 C1 N3 C5 C4 -62.5(4) ?
 C1 N3 C5 C12 56.6(4) ?
 O2 C5 C4 C3 174.5(3) ?
 N3 C5 C4 C3 52.9(4) ?
 C12 C5 C4 C3 -61.0(4) ?
 C5 N3 C1 O1 -171.7(3) ?
 C5 N3 C1 C2 6.5(4) ?
 C3 C2 C1 O1 -128.1(4) ?
 C24 C2 C1 O1 116.0(4) ?
 C3 C2 C1 N3 53.7(4) ?
 C24 C2 C1 N3 -62.2(4) ?
 C15 O5 C14 O4 -169.5(4) ?
 C15 O5 C14 N2 11.4(4) ?
 C13 N2 C14 O4 9.2(7) ?
 C16 N2 C14 O4 -174.0(4) ?
 C13 N2 C14 O5 -171.9(4) ?
 C16 N2 C14 O5 4.9(4) ?
 C1 C2 C24 C25 -78.3(4) ?
 C3 C2 C24 C25 164.6(3) ?
 C1 C2 C24 C12 48.9(4) ?
 C3 C2 C24 C12 -68.1(4) ?
 C14 N2 C13 O3 173.9(4) ?
 C16 N2 C13 O3 -2.6(5) ?
 C14 N2 C13 C12 -6.2(6) ?

C16 N2 C13 C12 177.3(3) ?
C27 C28 N1 C29 -0.6(7) ?
Cl1 C28 N1 C29 179.5(3) ?
O3 C13 C12 C24 -71.0(5) ?
N2 C13 C12 C24 109.0(4) ?
O3 C13 C12 C5 51.1(5) ?
N2 C13 C12 C5 -128.9(3) ?
C25 C24 C12 C13 -98.0(4) ?
C2 C24 C12 C13 137.5(3) ?
C25 C24 C12 C5 136.6(3) ?
C2 C24 C12 C5 12.1(4) ?
O2 C5 C12 C13 56.7(4) ?
N3 C5 C12 C13 173.0(3) ?
C4 C5 C12 C13 -71.2(4) ?
O2 C5 C12 C24 179.7(3) ?
N3 C5 C12 C24 -63.9(3) ?
C4 C5 C12 C24 51.9(4) ?
C14 N2 C16 C15 -17.6(4) ?
C13 N2 C16 C15 159.5(3) ?
C14 N2 C16 C17 102.9(4) ?
C13 N2 C16 C17 -80.0(5) ?
C27 C26 C25 C29 2.8(6) ?
C27 C26 C25 C24 -175.3(4) ?
C12 C24 C25 C26 -43.5(5) ?
C2 C24 C25 C26 80.2(5) ?
C12 C24 C25 C29 138.4(4) ?
C2 C24 C25 C29 -97.9(4) ?
C14 O5 C15 C16 -22.5(4) ?
N2 C16 C15 O5 23.0(4) ?
C17 C16 C15 O5 -95.2(4) ?
C5 C4 C3 C2 3.2(5) ?
C1 C2 C3 C4 -57.3(4) ?
C24 C2 C3 C4 59.3(4) ?
N1 C28 C27 C26 0.1(7) ?
Cl1 C28 C27 C26 180.0(3) ?
C25 C26 C27 C28 -1.3(6) ?
C28 N1 C29 C25 2.3(7) ?
C26 C25 C29 N1 -3.5(7) ?
C24 C25 C29 N1 174.7(4) ?
C19 C18 C17 C16 105.5(5) ?

C23 C18 C17 C16 -73.3(5) ?
 N2 C16 C17 C18 179.0(4) ?
 C15 C16 C17 C18 -68.8(5) ?
 O2 Si1 C10 C11 -173.5(4) ?
 C8 Si1 C10 C11 -55.9(5) ?
 C6 Si1 C10 C11 60.7(5) ?
 C19 C18 C23 C22 -0.9(6) ?
 C17 C18 C23 C22 178.0(4) ?
 C23 C18 C19 C20 0.2(7) ?
 C17 C18 C19 C20 -178.6(4) ?
 O2 Si1 C8 C9 44.8(5) ?
 C10 Si1 C8 C9 -67.4(5) ?
 C6 Si1 C8 C9 168.1(5) ?
 C18 C23 C22 C21 -0.1(8) ?
 C18 C19 C20 C21 1.4(7) ?
 C19 C20 C21 C22 -2.5(8) ?
 C23 C22 C21 C20 1.9(8) ?
 O2 Si1 C6 C7 -72.9(6) ?
 C10 Si1 C6 C7 45.8(7) ?
 C8 Si1 C6 C7 166.8(6) ?

_diffn_measured_fraction_theta_max 0.997
 _diffn_reflns_theta_full 28.35
 _diffn_measured_fraction_theta_full 0.997
 _refine_diff_density_max 1.438
 _refine_diff_density_min -0.868
 _refine_diff_density_rms 0.092