

Figure 9. from Possible Chemical Composition And Interior Structure Models Of Venus Inferred From Numerical Modelling

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Earth

Reference

$C/MR^2 = 0.327 - 0.332$
 $[S]/[Fe] = 0.07 - 0.13$
 $[Si]/[Fe] = 0.86 - 1.2$
 $[Mg]/[Fe] = 0.93 - 1.1$

S-free

$C/MR^2 = 0.317 - 0.33$
 $[S]/[Fe] = 0$
 $[Si]/[Fe] = 0.89 - 1.4$
 $[Mg]/[Fe] = 0.9 - 1.1$

0.05 - 7% FeO

40 - 50% SiO₂

44 - 60% MgO

- log $f_{O_2} = 1.5 - 5.5$

0 - 0.73 wt% O

0.13 - 13 wt% Si

0 wt% S

0 - 3330 km

0 - 1.3 wt% O

0.12 - 13 wt% Si

3.9 - 7.9 wt% S

0 - 3300 km

0 - 3230 km

0 - 2.9 wt% O

0.04 - 12 wt% Si

9.1 - 22 wt% S

0.04 - 15% FeO

36 - 50% SiO₂

38 - 64% MgO

- log $f_{O_2} = 0.7 - 5.6$

Nominal

$C/MR^2 = 0.317 - 0.338$
 $[S]/[Fe] = 0 - 0.15$
 $[Si]/[Fe] = 0.82 - 1.4$
 $[Mg]/[Fe] = 0.89 - 1.1$

Venus

S-rich

$C/MR^2 = 0.32 - 0.351$
 $[S]/[Fe] = 0 - 0.5$
 $[Si]/[Fe] = 0.79 - 1.4$
 $[Mg]/[Fe] = 0.89 - 1.1$

