

Cl-Re (Chlorine-Rhenium)

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The Re-Cl phase diagram was unknown in [Massalski2]. [1970Dro] determined the Re-Cl partial phase diagram shown in Fig. 1 by using the fusion method.

Table 1 shows Re-Cl crystal structure data quoted from [2007Vil].

References

- 1970Dro:** D.V. Drobot, V.A. Aleksandrova, and B.G. Korshunov, Phase Equilibria in the $\text{ReCl}_3\text{-ReCl}_5$ System, *Russ. J. Inorg. Chem.*, 1970, **15**(5), p 584-585
2007Vil: P. Villars and K. Cenzual, *Pearson's Crystal Data CD-ROM*, ASM International, OH, 2007

Table 1 Re-Cl crystal structure data

Phase	Composition, at.% Cl	Pearson symbol	Space group	Strukturbericht designation	Prototype
(Re) (a)	0	<i>hP2</i>	<i>P6₃/mmc</i>	<i>A3</i>	Mg
ReCl_3	75	<i>hR72</i>	<i>R3m</i>
ReCl_4	80	<i>mP20</i>	<i>P12/c1</i>
ReCl_5	83.3	<i>mP48</i>	<i>P12₁/c1</i>
(Cl) (a)	100	<i>oC8</i>	<i>Cmca</i>	<i>A14</i>	I

(a) Not shown in Fig. 1

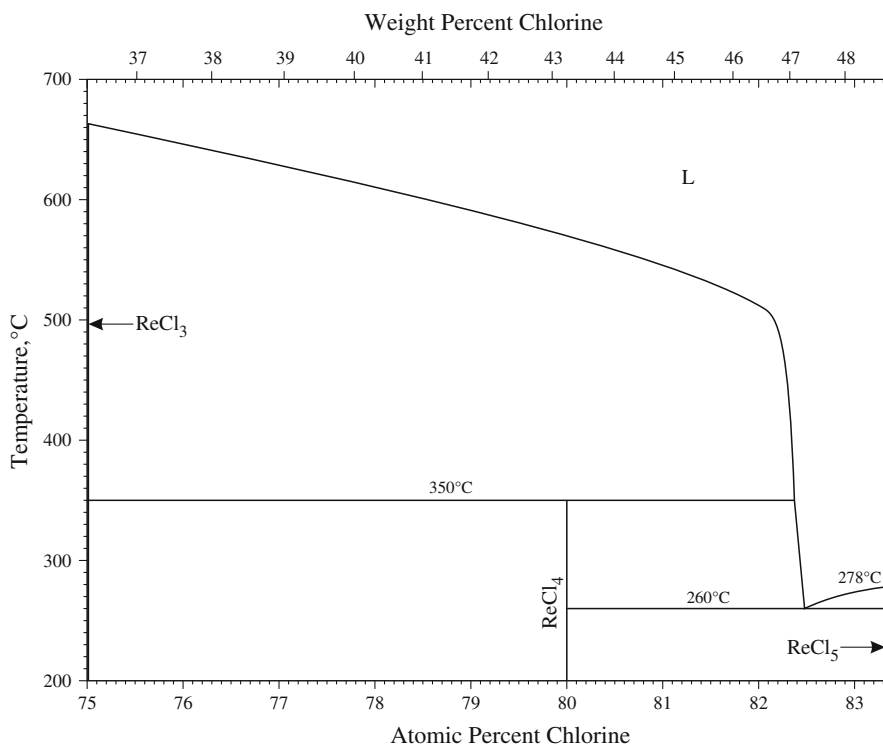


Fig. 1 Re-Cl phase diagram