



>>Entry Name: Nitrosyl chloride ((NO)Cl), ¹¹Cl

ENTRY UNDER REVIEW

CAS Registry Number: 2696-92-6

CINO (C_s)

Molecular Formula: CINO

Molecular Weight: 65.459

Accurate Mass: 64.966841

Percentage Composition: Cl 54.16%; N 21.40%; O 24.44%

Source/Synthesis: Synth. from NO₂ + KCl or HOSO₂ONO + HCl

Physical Description: Orange-yellow gas condensing to a deep red liq. The dry gas slowly attacks glass

Melting Point: Mp -61.5°

Boiling Point: Bp -6.4°

Solubility: Sol. fuming H₂SO₄

Density: d⁻¹² 1.417

Other Data: Hydrol. to HNO₂, HNO₃, NO and HCl. d (gas) 2.99 g l⁻¹. T_{crit} 167°, P_{crit} 92.4 atm

References:

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Millen, D.J. *et al.*, *J.C.S.*, 1961, 1322, (*struct*)

Gmelin Handbook Inorg. Chem., Syst. No.6, 1969, **B2**, 500, (*bibl*)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **1**, 474, (*synth*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, NMH000