



>>Entry Name: Potassium peroxodicarbonate

Synonym(s): Peroxydicarbonic acid dipotassium salt, 10CI. Dipotassium peroxodicarbonate

CAS Registry Number: 589-97-9

$K_2C_2O_6$

Molecular Formula: $C_2K_2O_6$

Molecular Weight: 198.215

Accurate Mass: 197.896904

Percentage Composition: C 12.12%; K 39.45%; O 48.43%

Source/Synthesis: Synth. by reaction of CO_2 with KOH in 86% aq. H_2O_2 at -5° to -20° (route 1), or by anodic oxidn. of satd. aq. K_2CO_3 at -20° (route 2)

Physical Description: Orange (route 1) or blue (route 2) powder

Hazard & Toxicity: Toxic, causes vomiting. Strong irritant

References:

Sokol, V.I. *et al.*, *Zh. Neorg. Khim.*, 1968, **13**, 2347, (powder struct)

Giguere, P.A. *et al.*, *Can. J. Chem.*, 1972, **50**, 1472, (ir, Raman)

Jones, D.P. *et al.*, *J.C.S. Dalton*, 1980, 2526, (ir, Raman, thermal anal)

Merck Index, 11th edn., 1989, No. 7640

Flanagan, J. *et al.*, *Spectrochim. Acta A*, 1989, **45**, 951, (ir, Raman)