



>>Entry Name: Tellurium(VI) oxide (TeO₃), 11Cl

Synonym(s): Tellurium trioxide

CAS Registry Number: 13451-18-8

Extra CAS Registry Numbers(s): 11099-09-5

TeO₃

Molecular Formula: O₃Te

Molecular Weight: 175.598

Accurate Mass: 177.890974

Percentage Composition: O 27.33%; Te 72.67%

Source/Synthesis: Synth. by dehydration of Te(OH)₆ at 300°

Use/Importance: Powerful oxidant (α-form)

Physical Description: Exists in orange (α-form), grey (β-form), less reactive, formed by heating the α-form

Solubility: Insol. H₂O, dil. H⁽⁺⁾, dil. OH⁽⁻⁾

Other Data: Dec. at 400° to TeO₂ + O₂

References:

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **1**, 438, (*synth*)

Gmelin Handbook Inorg. Chem., Syst. No 11, Suppl. Vol., 1976, **B1**, 75, (*bibl*)