

Ga OF

1963

GaOF

GaSF

Gallium chalcogenide halides. Harry Hahn and Hartmut Katscher (Univ. Wuerzburg, Ger.). Z. Anorg. Allgem. Chem. 321, 85-93(1963). The compds. GaOX and GaSX ( $X = F, Cl, Br, \text{ or } I$ ), and GaSeX and GaTeX ( $X = Cl, Br, \text{ or } I \text{ only}$ ) were prepd. by heating appropriate mixts. of the elements, Ga chalcogenides, and  $GaX_3$ . Optimum prepn. temps. ranged from 210 to 345°; even at these temps. considerable decompn. occurred. GaOF and GaSF, which are chem. inert, did not decomp. at 655 and 670°, resp. Except for these, the compds. are very  $H_2O$ -sensitive. X-ray diffraction data and d. detns. suggest that several of the compds. are isotypic with each other and probably with  $AlOCl$ . The chalcogenide halides of Al, Ga, In, and Tl are compared.

Richard H. Jaquith

C.A. 1963. 58. 13

13414 de

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V. 6143

1967

GaOF ( $\Delta H_f$ ,  $\Delta H_{atomization}$ )  
 $Mn^+$ ,  $MnF^+$ ,  $MnF_2^+$ ,  $Ge^+$ ,  $GeF^+$ ,  $GeF_2^+$ ,  $GaOF$   
(A.P.)

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2649-2650

Prex, 1968, 18595

M, 10

GaOF(2) 10m. 22605 1974

Ngai L. H., Stafford F. E.,

M. N.,  
Kp;

Adv. High Temp. Chem.,  
1974, 3, 213-270.