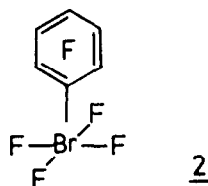
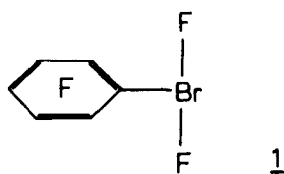


I₅₈ARYLDERIVATIVES OF BrF₅

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After successful preparation of the first arylbromine(III)difluoride 1 by nucleophilic substitution on BrF₃ we investigated the preparation of arylbromine(V)tetrafluorides.



With C₆F₅BrF₄ 2 we report the first organo derivative of BrF₅. We describe the use of several aryl-transfer-reagents for BrF₅, discuss mechanistic aspects of formation and report attempts of arylpolysubstitution.

Further we discuss two types of reactions of ArBrF₄:

- a) oxidative fluorination reactions (compared to ArBrF₂, BrF₅ and IF₅)
- b) nucleophilic substitution of bromine-bonded fluorine (preparation of C₆F₅BrO₂ and C₆F₅BrO(O₂CCF₃)₂).

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