



>>Entry Name: Tetraiodobismuthate(*III*)(1-), 13Cl

CAS Registry Number: 14636-74-9
[BiI₄]⁽⁻⁾

Molecular Formula: BiI₄⁽⁻⁾
Molecular Weight: 716.598
Accurate Mass: 716.598266
Percentage Composition: Bi 29.16%; I 70.84%

>>Derivative: K salt
Synonym(s): Dragendorff's reagent

CAS Registry Number: 39775-75-2
Molecular Formula: BiI₄K
Molecular Weight: 755.697
Accurate Mass: 755.561973
Percentage Composition: Bi 27.65%; I 67.17%; K 5.17%
Source/Synthesis: Synth. from BI₃ + KI (aq.) at r.t.
Use/Importance: Analytical reagent for the detn. of org. substances
Physical Description: Transparent dark red plates (H₂O)

>>Derivative: Tetrabutylammonium salt

CAS Registry Number: 22364-17-6
Molecular Formula: C₁₆H₃₆BiI₄N
Molecular Weight: 959.066
Percentage Composition: C 20.04%; H 3.78%; Bi 21.79%; I 52.93%; N 1.46%
Use/Importance: Suggested for gravimetric or spectrophotometric detn. of Bi
Physical Description: Red cryst.
Melting Point: Mp 161-163°
Solubility: Insol. H₂O; sol. CHCl₃

>>Derivative: Ph₄As salt

CAS Registry Number: 59890-68-5
Molecular Formula: C₂₄H₂₀AsBiI₄
Molecular Weight: 1099.942
Percentage Composition: C 26.21%; H 1.83%; As 6.81%; Bi 19.00%; I 46.15%
Use/Importance: Suggested for spectrophotometric detn. of Bi
Physical Description: Orange-yellow solid
Solubility: Insol. H₂O; sol. 1,2-dichloroethane

>>Derivative: H compd.

References:

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