

Apollo Scientific Ltd
Whitefield Road, Bredbury,
Stockport, SK6 2QR, UK.
Tel:44(0)161 406 0505 Fax:44(0)161 406 0506
e-mail: QCDept@apolloscientific.co.uk



-CERTIFICATE OF ANALYSIS-

Product: Tributylhexadecylphosphonium bromide 95+%

Code Number: OR9113

CAS Number: 14937-45-2

Formula: C₂₈H₆₀P.Br

Batch Number: AS483793

Appearance: Off white crystalline solid

Melting Point: ~58-63 degrees C

Titration: 101.1%(Br-) as product
(0.1M AgNO₃)

Verified by: David Parton

Signed: --Digital document, no signature required--

Apollo Scientific Ltd
Whitefield Road, Bredbury,
Stockport, SK6 2QR, UK.
Tel:44(0)161 406 0505 Fax:44(0)161 406 0506
e-mail: QCDept@apolloscientific.co.uk



-CERTIFICATE OF ANALYSIS-

Identity: No authentic data. Off white crystalline powder and off white, waxy fused chunks with orange staining. MP is broad, poorly defined at 58-63C and probably a waste of time. FTIR gives quite a poor response (0.4Au) which is similar to other compounds with long alkyl chains. For titration trials, a relatively small sample size was chosen which dissolved readily in 50ml MeOH. When diluted to 100ml with H₂O, a gelatinous blob appeared in the vortex. When acidified with conc. HNO₃, the solution became milky with a potential reading of ~360mv. The 2nd effort using ~190mg titrated in normal way. The results were 99.6% and 101.1%. Both are perfectly acceptable, though we prefer the second for reliability. Water content not likely to work on KF. Approved, assuming ID is correct.

Verified by: David Parton

Signed: --Digital document, no signature required--