



## ASEAN Reference Substance (ARS)

ASEAN TECHNICAL COOPERATION IN PHARMACEUTICALS  
supported by Japan Pharmaceutical Manufacturers Association



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**Certificate of Analysis**

**ATENOLOL**

**Control No. M 213108**

Description : A white, crystalline powder.  
Infrared absorption : Concordant with the reference spectrum of Atenolol USPRS.  
Light absorption : A solution (20 µg per mL) in methanol exhibits maxima and minima at the same wavelengths as that of Atenolol USPRS.  
Melting range : Between 152° and 156.5° C  
Chromatographic purity : (HPLC method)  
Any individual impurity : Not more than 0.25%  
Total impurities : Not more than 0.5%  
Loss on drying : 0.4%  
Assay : 99.51% of C<sub>14</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub>, calculated on the dried basis, determined by HPLC method, compared with USPRS.  
Intended use : For HPLC, chemical assay and identification.  
Direction for use : Dry at 105° C to constant weight before use.  
Storage : Keep container tightly closed and protected from light, preferably at the temperature 2-8° C

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Retested Date : 9 November 2017

Next Retest Date : 9 November 2020