



PHARMA DEVILS

QUALITY CONTROL DEPARTMENT

STANDARD OPERATING PROCEDURE

Department: Quality Control	SOP No.:
Title: Uncertainty in Measurement	Effective Date:
Supersedes: Nil	Review Date:
Issue Date:	Page No.:

1.0 OBJECTIVE:

To lay down procedure for estimate the uncertainty in measurement of various procedures used in the Quality Control Department.

2.0 SCOPE:

This SOP is applicable to Quality Control Department.

3.0 RESPONSIBILITY - Execution - Executive QC

Checking - Assistant Manager QC

4.0 ACCOUNTABILITY - Manager - Quality Control

5.0 PROCEDURE:

5.1 The uncertainty in measurement should be calculated for all quantitative determinations in the laboratory.

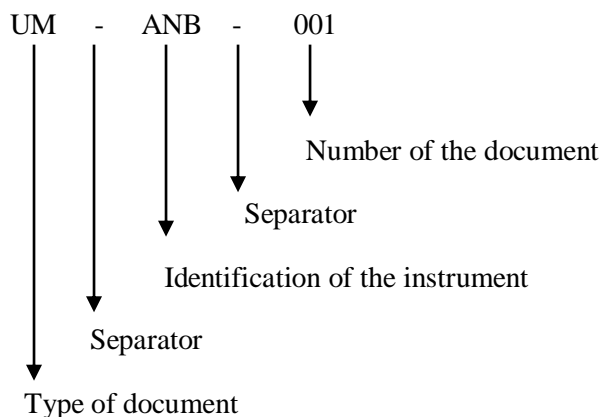
5.2 All the sources (Type A & Type B), which result to the uncertainty in measurement, should be identified.

5.3 Numbering of Uncertainty Documents:

5.3.1 All uncertainty documents shall be referred by 5 alphabetical, 3 numeric and 2 special characters, totaling to 10 characters.

5.3.2 The first 2 alphabetical characters denote the type of document, next 3 alphabetical characters denote the type of instrument/ test, which uncertainty shall be performed and the 3 numeric characters denote the number of the document.

For example,



5.4 After identifying the sources, calculate the Standard Uncertainty in measurement by making, minimum 5 and maximum 10, observations for Type A uncertainty as per NABL 141.

5.5 Calculate the combined Standard Uncertainty for Type A uncertainties as per NABL 141.



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- 5.6 Calculate the combined Standard Uncertainty for Type B uncertainties as per NABL 141.
- 5.7 Now calculate the total combined Standard Uncertainty (u) as per NABL 141.
- 5.8 Calculate the Expanded Uncertainty in Measurement (U), obtained by multiplying the combined Standard Uncertainty, u (y) of the output estimate, y, by a coverage factor, K as per NABL 141.
- 5.9 The record shall be maintained as Annexure - I.

6.0 SAFETY & PRECAUTIONS:

Not applicable.

7.0 REVISION HISTORY:

Revision No.	Reason for Revision	Superseded from & date
00	New	-----

8.0 DISTRIBUTION

Copy No.	Issuance Record				Withdrawal Record		Destruction Record	
	Date	Dept. issued	Name / Signature of receiver	Issued By Name / Signature	By	Sign/ Date	By	Sign/ Date

9.0 REFERENCES:

Not applicable

10.0 ABBREVIATIONS & ANNEXURES:

SOP : Standard Operating Procedure

QC : Quality Control

NABL : National Accreditation Board of calibration & testing Laboratories

Annexure - I: Record of Uncertainty

