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INSTRUMENT STANDARD OPERATING PROCEDURE MANUAL

College of Medicine



SAFETY AND LABORATORY COOMMITTEE, C.O.M, K.F.U.

Prepared by

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Document History

Document Section	Details of Amendments	Date	Modified by (Initials)
SOP	First Draft on SOP for the operation of Analytical Balance 1-250 gm, capacity and a readability of 0.0001 g.	1-12-2020	Lolwa Al helal Nourah Alshebli

1. OBJECTIVE

The document describes the operation of Analytical Balance 1-250 gm

Capacity and a readability of 0.0001 g.

2-SCOPE

A device used to determine the mass of objects, and since the mass ranges between kilograms and micrograms, the scales range between them in terms of capacity and use. Scales are expensive devices that must be handled with precision and caution

Space-Saving Design

The GR Series has a 30% smaller footprint compared with

.Conventional balances

.Its tall weighing chamber can accommodate large beakers

The glass panes disappear into the back when opening the

Door, requiring no extra space at the rear of the balance

Ideal for density measurement and weighing magnetic substances

RS-232C Interface

.Enables bi-directional communication with a PC or printer

Quick Reference Card

.A fast and convenient operation guide

Win CT–Window Communication Tools

Win CT is Windows Communication Tools Software, providing easy transmission of weighing

.data from A&D Balances to a PC using RS-232C interface

Data can be transferred in a manageable format limited only by a PC's capability

RsCom, RsKey and RsWeight offer user selectable time, date, sequential #,

.interval transmission and GLP/GMP data

A readme file contains all setup, operation & troubleshooting guides

3.RESponsibilities

- ☐ It is the responsibility of designated personnel in the lab to train staff and students on this procedure and to ensure adherence to this procedure under supervision.
- ☐ It is the responsibility of designated personnel (staff or Student) to follow the instructions of this procedure under supervision.

4.REFERENCES

<https://www.manualslib.com/manual/443263/AAndd-Gr-120.html?page=4#manual>

5.DEFINITIONS

Accessories

AD-1653

AD-1682

AD-1683

AD-1684A

AD-1687

AD-1688

AD-1689

AD-8127

AD-8526

AD-8527

AD-8920A

AD-8922A

AX-USB-25P

Density determination kit

Rechargeable battery unit

Static eliminator

Electrostatic fieldmeter

Weighing environment logger

Weighing data logger

Tweezers for calibration weight

Compact printer

Serial/Ethernet converter with WinCT-Plus

Quick USB adapter

Remote display

Remote controller

Serial/USB converter and cable set

6. SAFETY PRECAUTIONS

Do not place or use the balance where there is flammable or corrosive gas present.

Don't install the balance near heaters or air conditioners.

Don't install the balance in direct sunlight.

Don't use the balance near other equipment which produces magnetic fields.

7. PROCEDURE FOR OPERATING Analytical Balance Capacity 300^g. and a readability of 0.01 g.

7.1 Turning on the instrument:

1. We press the start button

2. Ensure that the scale itself is balanced

3 - Do the weighing process while you are standing directly in front of the scale.

4- Hold the weights and materials to be weighed with tongs and place them in the middle of the scale pan.

5- We define the unit of measurement

6- We make the device beep

7 - We open sliding doors, a small part of them

8- We put the material we want to weigh

9-Record the reading

7.3 Steps of the Procedure

Step 1 Calibrate your balance before use.

.Step 2 Place a container on the weighing pan, if necessary

.Press the RE ZERO key to cancel net weight. The balance displays zero

A vessel placed on the pan, but not to be included in the weighing Container:
.data

.Step 3 Place material on the pan or in the container

Step 4 Wait for the stabilization indicator to be displayed and read the value.

Step Step 5 Remove the material and container from the pan.

7.4Turning off the Instrument

We press the shutdown button

7.5 Warning

Write any the warning in BOLD and RED FONT.
