



PHARMA DEVILS

WAREHOUSE DEPARTMENT

STANDARD OPERATING PROCEDURE

Department: Warehouse

TITLE: Monitoring of Temperature, Relative Humidity and Differential Pressure in Stores Area

SOP No.		Revision No.	
Effective Date		Supersedes No.	
Review Date		Page No.	1 of 6

1.0 OBJECTIVE:

To lay down a procedure for monitoring temperature, relative humidity and differential pressure in Stores Area.

2.0 SCOPE:

This procedure is applicable to monitoring of temperature, relative humidity and differential pressure in Stores Area.

3.0 RESPONSIBILITY:

Stores-Officer, Executive,
Head Stores

4.0 PROCEDURE:

4.1 Recording of Temperature and relative humidity:

4.1.1 By Wet & Dry bulb Hygrometer:

- 4.1.1.1 Before using ensure that the hygrometer is calibrated.
- 4.1.1.2 Check the water level in the water compartment to keep the wick wet.
- 4.1.1.3 Ensure that the top end of the wick covers the mercury bulb completely.
- 4.1.1.4 Check the wick is free from the deposition of scale.
- 4.1.1.5 Fan/Aerify the bulb gently by any manual means until the mercury column remains steady.
- 4.1.1.6 Check the dry bulb temperature and wet bulb temperature from the thermometer and record it in Annexure-I.
- 4.1.1.7 Check the relative humidity against dry bulb temperature corresponding to the difference between dry bulb temperature and wet bulb temperature with the help of Chart and record the reading in the format as per the Annexure-I.

Frequency: Twice in a day for a particular area.

(**Morning:** - 8:00 hrs to 10.00 hrs & **Evening:** - 16:00 hrs to 18.00 hrs).

4.1.2 Recording of minimum and maximum Temperature and relative humidity by using digital hygrometer:

- 4.1.2.1 Ensure that the Digital hygrometer is calibrated and kept at the defined place.



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SOP No.		Revision No.	
Effective Date		Supersedes No.	
Review Date		Page No.	2 of 6

4.1.2.2 Press the “MODE” key on digital hygrometer then display will show the minimum temperature & minimum relative humidity on screen, record the reading in the format as per the Annexure III.

4.1.2.3 Press again the “MODE” key on digital hygrometer then display will show maximum temperature & maximum relative humidity on screen record the reading in the format as per the Annexure III.

4.1.2.4 After taking reading Clear the minimum and maximum temperature & relative humidity from Digital hygrometer by pressing “CLEAR” button or “SET” button on digital hygrometer and note down the same as “done” in Annexure III.

4.1.2.5 Press the “MODE” key on digital hygrometer then display will show again temperature & relative humidity on screen

4.1.2.6 Clean the digital hygrometer by using dry lint free cloth.

4.1.3 Limit of Temperature:

4.1.3.1 For All stores Area - Operating Limit: 19⁰ C to 25⁰ C

4.1.4 Limit of Relative Humidity:

4.1.4.1 For RM Dispensing Booth-1 - Operating limit : 30% to 40% (for low RH products; limit is 30% - 40% or as per product requirement)

For other RM Dispensing Booth - Operating limit : 45% to 55%

For Stores Area - Operating Limit: 40% to 60%

4.1.4.2 When the temperature/Humidity exceed standard limits, inform to head of department, Head QA and engineering department and fill the deviation report and Submit to QA dept for further process.

4.1.4.3 After corrective action note down the temperature / Humidity in particular annexure.

4.2 Recording of Differential Pressure:

4.2.1 Ensure that the magnehelic gauge of the concerned area is calibrated.

4.2.2 Ensure the zero error of the magnehelic gauge by opening the door of the concerned area.

4.2.3 Stores Officer shall ensure that all the doors are closed properly before recording the reading.

4.2.4 The recording of differential pressure shall be done for stores areas.



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Effective Date		Supersedes No.	
Review Date		Page No.	3 of 6

- 4.2.5 Check the reading and record the same in the format shown in the Annexure-II.
Differential pressure limit for Magnehelic gauge shall be NLT 1.5mm of WC.
- 4.2.6 When the differential pressure crosses the standard limits, inform to head of department, Head QA and engineering department and fill the deviation report and Submit to QA dept for further process and activity has to be stopped.
- 4.2.7 After doing corrective action, inform to Q.A. department, check the reading & record it.
- 4.2.8 The differential pressure recording revealed has to be recorded by Stores officer or concerned responsible person.
- 4.2.9 **Frequency:** Twice in a day for particular area.
(**Morning:** - 8:00hrs to 10.00hrs & **Evening:** - 16:00hrs to 18.00hrs).

5.0 ANNEXURE (S) :

Annexure-I: Temperature and relative Humidity record by wet & dry bulb hygrometer.

Annexure-II: Differential Pressure Reading Record.

Annexure-III: Minimum and Maximum temperature and relative humidity record by using digital hygrometer

6.0 REFERENCE (S) :

SOP: Preparation, approval, distribution control, revision and destruction of Standard Operating Procedure (SOP).

7.0 ABBREVIATION (S) /DEFINITION (S) :

QA : Quality assurance

STR : Store

NLT : Not Less than

REVISION CARD

S.No.	REVISION No.	REVISION DATE	DETAILS OF REVISION	REASON (S) FOR REVISION	REFERENCE CHANGE CONTROL No.
1	00	--	--	NEW SOP	--



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Review Date		Page No.	4 of 6

ANNEXURE 1

TEMPERATURE AND RELATIVE HUMIDITY RECORD BY WET & DRY BULB HYGROMETER

Reference SOP No.....			
Department		Month/Year	
Location		Temp. Limit	22°C ± 3°C
Hygrometer ID		RH Limit	30 to 40%*/ 45 to 55%**/ 40 to 60%***
Frequency: Twice in a day [Morning: 8:00hrs to 10.00hrs & Afternoon: 16:00hrs to 18.00hrs]			

Date	Time	Temperature (°C)		Difference (a-b)	Relative Humidity (%)	Checked By
		Dry Bulb Reading (a)	Wet Bulb Reading (b)			

* For RM Dispensing Booth-1 (for low RH products; limit is 30% to 40% or as per product requirement)

** For other RM Dispensing Booth (RH Limit is 45% to 55%)

*** For stores area (RH limit is 40% to 60%)



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Effective Date		Supersedes No.	
Review Date		Page No.	6 of 6

ANNEXURE 3

MINIMUM AND MAXIMUM TEMPERATURE AND RELATIVE HUMIDITY RECORD BY USING DIGITAL HYGROMETER

Reference SOP No.....

Department		Month/Year	
Location		Temp. Limit	22°C ± 3°C
Hygrometer ID		RH Limit	30 to 40%*/45 to 55%**/40 to 60%***

Frequency: Twice in a day

[**Morning:** 8:00 hrs to 10.00 hrs & **Afternoon:** 16:00 hrs to 18.00 hrs]

Date	Time	Temp. (°C)		RH (%)		Data Cleared /Set By	Checked By
		Min	Max	Min	Max		

* For RM Dispensing Booth-1 (for low RH products; limit is 30% to 40% or as per product requirement)

** For other RM Dispensing Booth (RH Limit is 45% to 55%)

*** For stores area (RH limit is 40% to 60%)