C.IV.i.2.1.

Drying

Introduction/Object: Analysis of drying process of granules.

Performing the practice:

1. Measure 5.000 g granule using thermoanalytical balance (mg precision).

2. Dry the measured granule to constant weight at 105 °C. (around 30 minutes)

3. Read off the weight loss in every second minutes.

Assessment:

Illustrate the weight loss and the left-over humidity in the function of time (weight loss and left-over humidity on y-axis/ time on x-axis).

University of Pécs Institute of Pharmaceutical Technology and Biopharmacy Laboratory education	Pages: 1/1 Practice number : **D.III.i.3.1**
Task: Drying	
Group:	Responsible for worksheet:
Practice supervisor :	Date:

Aim of practice: Analysis of drying process of granules.

Purity and quality of tools:

Tools	*Qualification*		*Controller's signature*
	Appropriate	*Inappropriate*	
METTLER Toledo PM 200 LP 16 thermoanalytical balance			
Patendula			

Measuring:

	Name of product:……	
Time [min.]	*Weight loss [g]*	*Relative humidity [%]*
0		
2		
4		
6		
8		
10		
12		
14		
16		
18		
20		
22		
24		
26		
28		
30		

Assessment:

Illustrate the relative humidity in the function of time (relative humidity on y-axis/ time on x-axis).
Illustrate the tg α (dW/dt) value according to the drying curve and the relative humidity (tg α on y-axis / relative humidity on x-axis) (drying speed curve!)
Calculate the left-over humidity and critical point of humidity on the basis of drying speed curve.