

Diferenčni dinamični kalorimeter (DSC)

Mettler Toledo DSC 1, STAR^e System



DSC je oprema, ki omogoča kvalitativno in kvantitativno vrednotenje fizikalnih in kemijskih procesov v **trdnih**, poltrdnih in tekočih sistemih(vzorcih).

DSC 1 odlikujejo:

- 1.Temperaturno območje od -100 do 450° C
- 2.Občutljivost od 0.04 μ W(FRS 5) do 0.01 μ W (HSS7)
- 3.Možnost uporabe kot klasičnega DSC ali kot MT DSC.

Pogosta uporaba v farmaciji:

- Določanje faznih prehodov 1. (npr. taljenje) ali 2. reda (temperatura steklastega prehoda)
- Študije polimorfizma in amorfnega stanja trdnih snovi
- Oksidativna stabilnost
- Kompatibilnostne študije
- Idr.

Lokacija: Katedra za farmacevtsko tehnologijo

Differential Scanning Calorimeter(DSC)

Mettler Toledo DSC 1, Star^e System



DSC 1 offers a qualitative and quantitative follow and measurement of physical and chemical processes and changes in solids, semisolids and liquids.

DSC 1 ensures:

1. Measurement in temperature range between -100 and + 450°C.
2. Resolution from 0.04 μ W (FRS 5) to 0.01 μ W (HSS7).
3. It might be used either as conventional DSC or as MT DSCDSC.

Scope of DSC usage in Pharmacy:

- Measurement of 1. (i.e. melting) and 2. order (glassy state temperature) phase transitions
- Study of polymorphic transitions and of amorphous solid state
- Oxidative stability
- Compatibility studies of APIs and excipients
- Others

Location:

Department of Pharmaceutical Technology