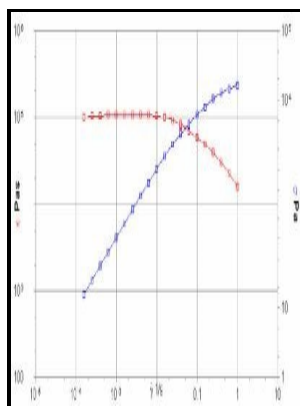


Number-average molecular weights - fundamentals and determination

Interscience Publishers - Difference Between Number Average and Weight Average Molecular Weight



Description: -

-

Popular music
Martinique
History and criticism
Guadeloupe
Music / History & Criticism
History & Criticism - General
Ethnomusicology
Caribbean islands
Music/Songbooks
Music
Folk music
Cultural studies
Contemporary popular music
African studies
Business / Economics / Finance
General

Molecular weights -- Measurement. Number-average molecular weights - fundamentals and determination
-Number-average molecular weights - fundamentals and determination

Notes: Includes bibliography.

This edition was published in 1958



Filesize: 6.48 MB

Tags: #How #to #Calculate #Molecular #Weight #of #Polymer

Number

The straight line extrapolations provides M_w .

Determination of Molecular Weight

When it is equal to one, the coefficient of variation is zero which means that the distribution is monodisperse.

Correction of osmometric number

Hence, measured polymer molecular weights are only average values. The number average and weight average molecular weight are such two forms.

2.2: Molecular Weight Determination

Thus a postcure was necessary for these systems to increase the conversion. Organic chemists call it size exclusion chromatography SEC, high-pressure liquid chromatography HPLC, gel filtration chromatography GFC and variants of these such as HPSEC, HPGFC, HPGPC. A major problem of light scattering is to prepare perfectly clear solutions.

Number Average Molecular Weight

For a new polymer a GPC is usually calibrated using monodisperse standards, most commonly polystyrene standards, which are available from most chemical suppliers such as Aldrich, Polymer Labs, and Pressure Chemicals. The polymers are linear in nature but, because of the difficulties large molecules have in crystallising, the densities are only of the order of 0.

2.2: Molecular Weight Determination

The melting points of these resins were in the range of 60—70°C, similar to the general-purpose UP resins whose melting points are in the range of 60—77°C. More importantly, the weight average molecular weight is always greater than the number average molecular weight since larger molecules in a sample weigh more than smaller molecules. With the exception of the COMA and SOGLYME resins, which were liquid at room temperature, all the malinated glyceride-based resins we prepared were pastelike solids at room temperature.

Number Average Molecular Weight Example

The viscometer used to measure dilute solution viscosity is usually a capillary viscometer. This is called the non-draining hypothesis and is a basis of intrinsic viscosity measurements. Use of a solution light scattering instrument usually requires prior experience and can be frustrating in that unknown sources of dust in the sample can often corrupt the data.

2.2: Molecular Weight Determination

Under these conditions the coil can be shown to display Gaussian statistics. A column is made up of swollen gel particles and the solvent used to swell the gel in a suitable tubular container. Unless otherwise noted, LibreTexts content is licensed by.

Related Books

- [Ke chi xu fa zhan de li lun yu shi jian](#)
- [From the ark to the archive](#)
- [Protestantisme historique et libération - renouveau oecuménique dans le Sud et dans le Nord](#)
- [Kyō no ojizōsan](#)
- [Training of non-industrial civil servants](#)