



Freeze-Drying of Pharmaceuticals and Biopharmaceuticals: Principles and Practice

By Felix Franks

Royal Society of Chemistry. Paperback. Book Condition: New. Paperback. 218 pages. Dimensions: 9.1in. x 6.1in. x 0.6in. Freeze-drying, in the past popular in the food industry, has more recently been adopted by the pharmaceutical industry as a standard method for the production of stable solid preparations. Freeze-drying of Pharmaceuticals and Biopharmaceuticals is the first book to specifically describe this process, as related to the pharmaceutical industry. The emphasis of this book is on the properties of the materials processed, how effective formulations are arrived at, and how they are stored and marketed. Beginning with a historical overview of the process, Freeze-drying of Pharmaceuticals and Biopharmaceuticals briefly describes the processes and equipment involved, including: the physics, chemistry and biochemistry associated with freezing, aspects of formulation development, primary and secondary drying; the economics and engineering of scaling up; and, most importantly, attributes of the dried product. It also discusses in detail the science behind freeze-drying, such as the properties of crystalline and amorphous solids. The book concludes with selected case studies and discusses the future of freeze-drying, advances in alternative drying methods, and concludes with an extensive bibliography. This book, written by a leading expert in the field, is aimed primarily at product...

 [READ ONLINE](#)

Reviews

A must buy book if you need to adding benefit. I have go through and that i am sure that i will gonna go through once more yet again down the road. I am just very happy to let you know that this is basically the best book i have got go through inside my own life and can be he very best book for at any time.

-- **Eldridge Reilly**

An extremely great ebook with lucid and perfect explanations. It is full of knowledge and wisdom Its been printed in an exceedingly straightforward way in fact it is merely right after i finished reading through this publication by which really transformed me, alter the way i believe.

-- **Spencer Fritsch**

See Also



[Summer Fit Preschool to Kindergarten Math, Reading, Writing, Language Arts Fitness, Nutrition and Values](#)

Summer Fit Learning. Paperback. Book Condition: New. Paperback. 160 pages. Dimensions: 10.6in. x 8.3in. x 0.5in. Summer Fit Activity Books move summer learning beyond academics to also prepare children physically and socially for the grade ahead. Academic exercises are based on Common Core...



[The Day I Forgot to Pray](#)

Tate Publishing. Paperback. Book Condition: New. Paperback. 28 pages. Dimensions: 8.7in. x 5.8in. x 0.3in. Alexis is an ordinary five-year-old who likes to run and play in the sandbox. On her first day of Kindergarten, she makes her first school-aged friend, Elizabeth, and...



[DK Readers Disasters at Sea Level 3 Reading Alone](#)

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.8in. x 5.7in. x 0.2in. From fog, ice, and rocks to cannon fire and torpedo attacks--read the story of five doomed sea voyages and the fate of those who took part in them....



[DK Readers Day at Greenhill Farm Level 1 Beginning to Read](#)

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.8in. x 5.7in. x 0.2in. This Level 1 book is appropriate for children who are just beginning to read. When the rooster crows, Greenhill Farm springs to life. Join the ducklings, cows, and...



[Eagle Song Puffin Chapters](#)

Puffin. Paperback. Book Condition: New. Dan Andreasen (illustrator). Paperback. 80 pages. Dimensions: 7.6in. x 4.9in. x 0.3in. A contemporary middle grade story about confronting bullying and prejudice Danny Bigtrees family has moved to Brooklyn, New York, and he just cant seem to fit...



[Harts Desire Book 2.5 La Fleur de Love](#)

Cajunflair Publishing. Paperback. Book Condition: New. Paperback. 112 pages. Dimensions: 8.0in. x 5.0in. x 0.3in. Its late 1974, and high school student, Melinda Dawson is in serious trouble. Within two hours of revealing her suspected pregnancy to her parents, shes whisked off against...