

Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series)

Download now

Click here if your download doesn"t start automatically

Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series)

Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series)

Particulate products make up around 80% of chemical products, from all industry sectors. Examples given in this book include the construction materials, fine ceramics and concrete; the delicacies, chocolate and ice cream; pharmaceutical, powders, medical inhalers and sun screen; liquid and powder paints. Size distribution and the shape of the particles provide for different functionalities in these products. Some functions are general, others specific. General functions are powder flow and require – at the typical particulate concentrations of these products – that the particles cause adequate rheological behavior during processing and/or for product performance. Therefore, this book addresses particle packing as well as its relation to powder flow and rheological behavior. Moreover, general relationships to particle size are discussed for e.g. color and sensorial aspects of particulate products. Product-specific functionalities are often relevant for comparable product groups. Particle size distribution and shape provide, for example, the following functionalities:

- dense particle packing in relation to sufficient strength is required in concrete construction, ceramic objects and pharmaceutical tablets
- good sensorial properties (mouthfeel) to chocolate and ice cream
- effective dissolution, flow and compression properties for pharmaceutical powders
- adequate hiding power and effective coloring of paints for protection and the desired esthetical appeal of the objects
- adequate protection of our body against sun light by sunscreen
- effective particle transport and deposition to desired locations for medical inhalers and powder paints.

Adequate particle size distribution, shape and porosity of particulate products have to be achieved in order to reach optimum product performance. This requires adequate management of design and development as well as sufficient knowledge of the underlying principles of physics and chemistry. Moreover, flammability, explosivity and other health hazards from powders, during handling, are taken into account. This is necessary, since great risks may be involved. In all aspects, the most relevant parameters of the size distribution (and particle shape) have to be selected.

In this book, experts in the different product fields have contributed to the product chapters. This provides optimum information on what particulate aspects are most relevant for behavior and performance within specified industrial products and how optimum results can be obtained. It differs from other books in the way that the critical aspects of different products are reported, so that similarities and differences can be identified. We trust that this approach will lead to improved optimization in design, development and quality of many particulate products.

▼ Download Particulate Products: Tailoring Properties for Opt ...pdf

Read Online Particulate Products: Tailoring Properties for O ...pdf

Download and Read Free Online Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series)

From reader reviews:

Patrick Spradlin:

Hey guys, do you wants to finds a new book you just read? May be the book with the concept Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) suitable to you? The book was written by famous writer in this era. Often the book untitled Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) is the main of several books in which everyone read now. This kind of book was inspired a number of people in the world. When you read this guide you will enter the new dimension that you ever know ahead of. The author explained their plan in the simple way, consequently all of people can easily to be aware of the core of this book. This book will give you a lot of information about this world now. In order to see the represented of the world with this book.

Fabiola Stewart:

The reserve with title Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) includes a lot of information that you can find out it. You can get a lot of benefit after read this book. This kind of book exist new understanding the information that exist in this reserve represented the condition of the world now. That is important to yo7u to learn how the improvement of the world. That book will bring you in new era of the glowbal growth. You can read the e-book on your smart phone, so you can read that anywhere you want.

Sheryl Vaughan:

Playing with family in a park, coming to see the water world or hanging out with friends is thing that usually you have done when you have spare time, and then why you don't try issue that really opposite from that. Just one activity that make you not feeling tired but still relaxing, trilling like on roller coaster you already been ride on and with addition associated with. Even you love Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series), you could enjoy both. It is great combination right, you still want to miss it? What kind of hangout type is it? Oh seriously its mind hangout fellas. What? Still don't get it, oh come on its named reading friends.

William Marshall:

This Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) is new way for you who has attention to look for some information as it relief your hunger associated with. Getting deeper you in it getting knowledge more you know otherwise you who still having tiny amount of digest in reading this Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) can be the light food in your case because the information inside this specific book is easy to get by anyone. These books produce itself in the form that is certainly reachable by anyone, yeah I mean in the e-book application form. People who think that in guide form make them feel drowsy even dizzy this reserve is the answer. So there isn't any in reading a e-book especially this one. You can find what you

are looking for. It should be here for you. So , don't miss the idea! Just read this e-book sort for your better life along with knowledge.

Download and Read Online Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) #2LEOIS783XN

Read Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) for online ebook

Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) books to read online.

Online Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) ebook PDF download

Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) Doc

Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) Mobipocket

Particulate Products: Tailoring Properties for Optimal Performance: 19 (Particle Technology Series) EPub