

# Handbook of Pharmaceutical Excipients

KVK-Tech Flat Line Capital Exhibit 1020



# Handbook of Pharmaceutical Excipients

FIFTH EDITION

Edited by

## Raymond C Rowe

BPharm, PhD, DSc, FRPharmS, CChem,  
FRSC, CPhys, MInstP

### Chief Scientist

Intelligensys Ltd  
Billingham, UK

## Paul J Sheskey

BSc, RPh

### Technical Services Leader

The Dow Chemical Company  
Midland  
MI, USA

## Siân C Owen

BSc, MA

### Development Editor

Royal Pharmaceutical Society of Great Britain  
London, UK



London • Chicago

KVK-Tech Flat Line Capital Exhibit 1020

**Published by the Pharmaceutical Press**


Publications division of the Royal Pharmaceutical Society of Great Britain

1 Lambeth High Street, London SE1 7JN, UK  
100 South Atkinson Road, Suite 206, Grayslake, IL 60030-7820, USA

**and the American Pharmacists Association**

2215 Constitution Avenue, NW, Washington, DC 20037-2985, USA

© Pharmaceutical Press and American Pharmacists Association 2006

 is a trademark of Pharmaceutical Press

First published 1986  
Second edition published 1994  
Third edition published 2000  
Fourth edition published 2003  
Fifth edition published 2006

Printed in Great Britain by Butler & Tanner, Frome, Somerset  
Typeset by Data Standards Ltd, Frome, Somerset

ISBN 0 85369 618 7 (UK)  
ISBN 1 58212 058 7 (USA)

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, without the prior written permission of the copyright holder.

The publisher makes no representation, express or implied, with regard to the accuracy of the information contained in this book and cannot accept any legal responsibility or liability for any errors or omissions that may be made.

*A catalogue record for this book is available from the British Library*

**Library of Congress Cataloging-in-Publication Data**

Handbook of pharmaceutical excipients.—5th ed. / edited by Raymond C. Rowe, Paul J. Sheskey, Siân C. Owen.

p. ; cm.

Includes bibliographical references and index.

ISBN 1-58212-058-7 (USA) – ISBN 0-85369-618-7 (UK)

1. Excipients—Handbooks, manuals, etc.

[DNLM: 1. Excipients—Handbooks. 2. Technology, Pharmaceutical—Handbooks. QV 735 H236 2006] I. Rowe, Raymond C. II. Sheskey, Paul J. III. Owen, Siân C. IV. American Pharmacists Association.

RS201.E87H36 2006  
615'.19—dc22

2005028523

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.