

pany:

e

n

age of all the essential
acts.
rmation gives you the
ial data you need.
our widespread net-
ther, organize and
a timely manner.
re it is published.
ed for quick,
ly for fast reference.

Place
Stamp
Here



PHYSICIANS' DESK REFERENCE FOR OPHTHALMOLOGY®

Editorial Consultants and Contributors

Clement A. Weisbecker, RPh, Director of Pharmacy, Wills Eye Hospital, Philadelphia, PA
F.T. Fraunfelder, MD, Director, National Registry of Drug-Induced Ocular Side Effects, Oregon Health Sciences University, Portland, OR
Michael Naldoff, MD, Cornea Service, Wills Eye Hospital, Philadelphia, PA
Douglas Rhee, MD, Wills Eye Hospital, Philadelphia, PA
Richard Tippermann, MD, Wills Eye Hospital, Philadelphia, PA

Vice President of Directory Services: Stephen B. Greenberg

Director of Product Management: David P. Reiss

Senior Product Manager: Mark A. Friedman

Associate Product Manager: Bill Shaughnessy

National Sales Manager: Dikran N. Barsamian

National Account Manager, Customized Projects:

Anthony Sorce

Senior Account Manager: Don Bruccoleri

Account Managers: Marion Gray, RPh, Lawrence C. Keary,

Jeffrey F. Pfohl, Christopher N. Schmidt,
Stephen M. Silverberg, Suzanne E. Yarrow, RN

National Sales Manager, Trade Group: Bill Gaffney

Director of Direct Marketing: Michael Bennett

Direct Marketing Manager: Lorraine M. Loening

Promotion Manager: Donna R. Lynn

Director, Professional Support Services:

Mukesh Mehta, RPh

Senior Drug Information Specialist:

Thomas Fleming, RPh

Drug Information Specialist: Maria Deutsch, MS, RPh, CDE

Editor, Special Projects: David W. Sifton

Vice President of Production: David A. Pitler

Director of Print Purchasing: Marjorie A. Duffy

Director of Operations: Carrie Williams

Manager of Production: Kimberly H. Vivas

Senior Production Coordinators: Amy B. Brooks,

Dawn B. McCall

Production Coordinator: Mary Ellen R. Breun

Index/Format Manager: Jeffrey D. Schaefer

Senior Format Editor: Gregory J. Westley

Index Editors: Johanna M. Mazur, Robert N. Woerner

Art Associate: Joan K. Akerlind

Senior Digital Imaging Coordinator: Shawn W. Cahill

Digital Imaging Coordinator: Frank J. McElroy, III

Electronic Publishing Designer: Robert K. Grossman

Fulfillment Managers: Stephanie DeNardi, Kenneth Siebert

Copyright © 1998 and published by Medical Economics Company, Inc. at Montvale, NJ 07645-1742. All rights reserved. None of the content of this publication may be reproduced, stored in a retrieval system, resold, redistributed, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise) without the prior written permission of the publisher. PHYSICIANS' DESK REFERENCE®, PDR®, PDR For Nonprescription Drugs®, PDR For Ophthalmology®, Pocket PDR®, and The PDR® Family Guide to Prescription Drugs® are registered trademarks used herein under license. PDR Companion Guide™, PDR® for Herbal Medicines™, PDR® Medical Dictionary™, PDR® Nurse's Handbook™, PDR® Nurse's Dictionary™, PDR® Atlas of Anatomy™, The PDR® Family Guide Encyclopedia of Medical Care™, PDR® Electronic Library™, and PDR® Drug Interactions, Side Effects, Indications, Contraindications System™ are trademarks used herein under license.

Officers of Medical Economics Company: *President and Chief Executive Officer:* Curtis B. Allen; *Vice President, New Media:* L. Suzanne BeDell; *Vice President, Corporate Human Resources:* Pamela M. Bilash; *Vice President and Chief Information Officer:* Steven M. Bressler; *Senior Vice President, Finance, and Chief Financial Officer:* Thomas W. Ehardt; *Vice President, Directory Services:* Stephen B. Greenberg; *Vice President, New Business Planning:* Linda G. Hope; *Executive Vice President, Healthcare Publishing and Communications:* Thomas J. Kelly; *Executive Vice President, Magazine Publishing:* Lee A. Maniscalco; *Vice President, Group Publisher:* Terrence W. Meacock; *Vice President, Production:* David A. Pitler; *Vice President, Group Publisher:* Thomas C. Pizor; *Vice President, Magazine Business-Management:* Eric Schlett; *Senior Vice President, Operations:* John R. Ware

ISBN: 1-56363-290-X

CONTENTS

Section 1: Indices

Page I

1. Manufacturers' Index.....	I
2. Product Name Index	III
3. Product Category Index.....	VI
4. Active Ingredients Index	IX

Section 2: Pharmaceuticals in Ophthalmology

Page 1

1. Mydriatics and Cycloplegics	2
2. Antimicrobial Therapy	2
3. Ocular Anti-inflammatory Agents.....	7
4. Anesthetic Agents	9
5. Agents for Treatment of Glaucoma	10
6. Medications for Dry Eye.....	13
7. Ocular Decongestants	14
8. Ophthalmic Irrigating Solutions.....	15
9. Hyperosmolar Agents	15
10. Diagnostic Agents	16
11. Viscoelastic Materials Used in Ophthalmology.....	17
12. Off-Label Drug Applications in Ophthalmology	17
13. Ocular Toxicology.....	19

Section 3: Suture Materials

Page 23

Section 4: Ophthalmic Lenses

Page 25

1. Soft Contact Lenses.....	25
2. Aphakic Lenses.....	50
3. Comparison and Conversion Tables	52

Section 5: Vision Standards and Low Vision

Page 56

1. Vision Standards.....	56
2. Low-Vision Aids	58

Section 6: Evaluation of Permanent Visual Impairment

59

1. Criteria and Methods	59
2. Visual System Impairment Values	68
3. Combined Values Chart	71

ing family of PD
00-232-7379 or r

netics (FD&C) Act,
labeled, promote
only those uses
ess have been esta
ations 201.100(d)
in products requir
esk Reference F
i, dosages, route
on of administrati
s, contraindicatio
it be in the "san
oved labeling for t
same language a
se of the approv
Furthermore, inf
s emphasized by t
s, boldface, or ital
in *Physicians' De*

FD&C Act does not
physician may use
s been approved
e it for uses or
lations that are
A also observes th
des drug use that
g. For products th
s, the publisher h
bing such produc
have access to
id informed decis
r-the-counter deta
ed that this inform
he Food and Dr
s are not intended
lisease.

ompilation, organiz
tion. Each produ
s manufacturer, a
ufacturer's medic
medical consultan
terial in *Physician*
e publisher does n
ducts described, i
connection with a
herein. *Physician*
es not assume, a
obtain and inclu
vided to it by th
l that by making t
advocating the us
or is the publish
lue to typographic
y product may b

Section 7: Product Identification Guide **Page 101**

- 1. Index.....102
- 2. Full-Color Product Photographs.....103

Section 8: Pharmaceutical and Equipment Product Information **Page 201**

Listed alphabetically by manufacturer

Section 9: Intraocular Product Information **Page 315**

Key to Controlled Substances Categories **Page 319**

Key to FDA Use-in-Pregnancy Ratings **Page 320**

Amsler's Grid **Inside Front Cover**

SECTION 1 INDICE

This section offers f
mation you need:

1. Manufacturers'
participating manu
two page numbers
graphs in the Proc
ond to product i
addresses and tele
headquarters and re

2. Product Name I
uct information alp
mond symbol to the
tograph of the
Identification Guide
page number refer:

PART I/MANUF

AKORN, INC.

2500 Millbrook Driv
Buffalo Grove, IL 60
Direct Inquiries to:
Customer Service
(800) 535-7155

ALCON LABORATOR

and its Affiliates
Corporate Headqua
6201 South Freewe
Fort Worth, TX 761
Direct Inquiries to:
Ophthalmic/VisionC
(Pharmaceuticals/L
Surgical: (800) 862
(Instrumentation/S
Systems: (800) 28
(Medical Managem
Systems)

ALLERGAN

2525 Dupont Drive
P.O. Box 19534
Irvine, CA 92623-9
For Medical Inform
Outside CA: (800)
CA: (714) 246-45C
Sales and Ordering
Outside CA: (800)
CA: (714) 246-45C

**BAUSCH & LOMB .
PHARMACEUTI**

8500 Hidden River
Tampa, FL 33637

6. MEDICATIONS FOR DRY EYE

Dry eye refers to a deficiency in either the aqueous or mucin components of the precorneal tear film. The most commonly encountered aqueous-deficient dry eye in the United States is keratoconjunctivitis sicca, while mucin-deficient dry eyes may be seen in cases of hypovitaminosis A, Stevens-Johnson syndrome, ocular pemphigoid, extensive trachoma, and chemical burns.

Dry eye is treated with artificial tear preparations (see **Table 20**) and ophthalmic lubricants (see **Table 21**). The lubricants form an occlusive film over the ocular surface and protect the eye from drying. Administered as a nighttime medication, they are useful both for dry eye and in cases of recurrent corneal erosion.

TABLE 20

ARTIFICIAL TEAR PREPARATIONS

MAJOR COMPONENT(S)	CONCENTRATION (%)	TRADE NAME	PRESERVATIVE/EDTA*
Carboxymethyl cellulose	0.5%	Refresh Plus	None
	1%	Celluvisc	None
	0.25%	Theratears	None
Glycerin	3%	Dry Eye Therapy	None
Hydroxyethyl cellulose, polyvinyl alcohol		TearGard	Sorbic acid, EDTA
Hydroxypropyl cellulose		Lacrisert (biodegradable insert)	None
Hydroxypropyl methylcellulose	0.5%	Isopto Plain	Benzalkonium chloride
	1%	Isopto Tears	Benzalkonium chloride
Hydroxypropyl methylcellulose, dextran 70		Tearisol	Benzalkonium chloride, EDTA
		Isopto Alkaline	Benzalkonium chloride
		Bion Tears	None
		Ocucoat	Benzalkonium chloride, EDTA
		Ocucoat PF	None
Methylcellulose	1%	Tears Naturale II	Polyquad
		Tears Naturale Free	None
		Tears Renewed	Benzalkonium chloride, EDTA
		Murocel	Methyl-, propylparabens
Polycarbophil, PEG-400, dextran 70		AquaSite	EDTA
		AquaSite multi-dose	EDTA, Sorbic acid
Polysorbate 80		Viva Drops	EDTA
Polyvinyl alcohol	1.4%	AKWA Tears	Benzalkonium chloride, EDTA
	3%	Dry Eyes	Chlorobutanol
Polyvinyl alcohol, PEG-400, dextrose	1%	Liquifilm Tears	Chlorobutanol
		HypoTears	Benzalkonium chloride, EDTA
		HypoTears PF	EDTA
Polyvinyl alcohol, povidone	1.4%	Puralube Tears	Benzalkonium chloride, EDTA
	0.6%	Murine Tears	Benzalkonium chloride, EDTA
		Refresh	None
		Tears Plus	Chlorobutanol

*EDTA = ethylenediaminetetraacetic acid.

SET/DURATION
ACTION

min/5-6 h
60 min/6 h
45 min/5-6 h

ONSET/DURATION
OF ACTION

2 h/4-6 h

5-10 min/2 h

30 min/6 h

2 h/4-6 h

SIZE(S)(mL)

5
single use bottle
5, 10, 15

SIZE(S)(mL)

2.5

TABLE 21

OPHTHALMIC LUBRICANTS

TRADE NAME	COMPOSITION OF STERILE OINTMENT
AKWA Tears Ointment	White petrolatum, liquid lanolin, and mineral oil
Dry Eyes	White petrolatum, liquid lanolin, and mineral oil
Duolube	White petrolatum and mineral oil
Duratears Naturale	White petrolatum, liquid lanolin, and mineral oil
HypoTears	White petrolatum and light mineral oil
Lacri-Lube S.O.P., Lubritears	42.5% mineral oil, 55% white petrolatum, lanolin alcohol, and chlorobutanol
Puralube	White petrolatum, liquid lanolin, and mineral oil
Refresh P.M., Dry Eyes Lubricant	41.5% mineral oil, 55% white petrolatum, petrolatum, and lanolin alcohol

7. OCULAR DECONGESTANTS

These topically applied adrenergic medications are commonly used to whiten the eye. Three types are available. Those containing naphazoline and tetrahydrozoline are more stable than those with phenylephrine. Usual dosage is 1 or 2 drops no more than 4 times a day (see **Table 22**).

TABLE 22

OCULAR DECONGESTANTS

DRUG	TRADE NAME	ADDITIONAL COMPONENTS
Naphazoline hydrochloride	AK-Con*	Benzalkonium chloride, edetate disodium
	Albalon*	Benzalkonium chloride, edetate disodium
	Clear Eyes	Benzalkonium chloride, edetate disodium
	Naphcon	Benzalkonium chloride, edetate disodium
	Vasoclear	Benzalkonium chloride, edetate disodium
Oxymetazoline hydrochloride	Vasoclear	Benzalkonium chloride, edetate disodium
	Vasocon Regular*	Phenylmercuric acetate
Oxymetazoline hydrochloride	Visine L.R.	Benzalkonium chloride, edetate disodium
	Ocuclear	Benzalkonium chloride, edetate disodium
Phenylephrine hydrochloride	AK-Nefrin	Benzalkonium chloride, edetate disodium
	Eye Cool	Thimerosal, edetate disodium
	Prefrin Liquifilm	Benzalkonium chloride, edetate disodium
	Relief	—
Tetrahydrozoline hydrochloride	Collyrium Fresh	Benzalkonium chloride, edetate disodium
	Murine Plus	Benzalkonium chloride, edetate disodium
	Visine	Benzalkonium chloride, edetate disodium

DECONGESTANT/ASTRINGENT COMBINATIONS

Naphazoline hydrochloride plus zinc sulfate	Clear Eyes ACR (allergy/cold relief)	Benzalkonium chloride, edetate disodium
Phenylephrine hydrochloride plus zinc sulfate	Zincfrin	Benzalkonium chloride
Tetrahydrozoline plus zinc sulfate	Visine Allergy Relief	Benzalkonium chloride, edetate disodium

*Prescription medication.

8. OPHTHA

Listed in **Table 23** general ophthalmic products. There are actions available for

TABLE 23

OPHTHALMIC II**TRADE NAME**

AK-Rinse

Collyrium Fresh Eyes

Dacriose

Eye-Stream

Irigate

Lavoptik Eye Wash

9. HYPER

Hyperosmolar (hy
They act through

TABLE 24

HYPEROSMO**GENERIC NAME**

A. Therapeutic prepa
Sodium chloride

B. Diagnostic prepa
Glycerin

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.