
CONTENTS

FOREWORD / VII
PREFACE / IX
CONTRIBUTORS / XI

...

SECTION I : BACKGROUND

1 / Introduction / 3
Lloyd B. Tepper

2 / History of Beryllium / 9
Martin B. Powers

...

SECTION II : PROPERTIES, PRODUCTION, AND APPLICATIONS

3 / Properties, Production Processes, and Applications / 27
A. James Stonehouse and Stephen Zenczak

...

SECTION III : TOXICOLOGY OF BERYLLIUM

4 / Experimental Pathology / 59
Andrew L. Reeves

5 / Toxicokinetics / 77
Andrew L. Reeves

6 / Toxicodynamics / 87
Andrew L. Reeves

...

SECTION IV : ASSESSMENT OF HUMAN CARCINOGENICITY

7 / Assessment of Human Carcinogenicity / 97

Brian MacMahon

...

SECTION V : ACUTE BERYLLIUM RELATED DISEASE

8 / Acute Pulmonary Beryllium Disease / 103

Paul K. Ridenour and Otto P. Preuss

9 / Cutaneous Effects of Beryllium / 113

William L. Epstein

...

SECTION VI : CHRONIC PULMONARY BERYLLIUM DISEASE
(CBD)

10 / Immunopathogenesis of Chronic Beryllium Disease / 121

*Milton D. Rossman and William Jones-Williams*11 / Clinical Picture and Nonimmunological Laboratory Findings in
Chronic Beryllium Disease / 133*Otto P. Preuss and Milton D. Rossman*

12 / Radiological Aspects of Chronic Beryllium Disease / 141

E. Nicholas Sargent

13 / Pathology and Histopathology of Chronic Beryllium Disease / 151

William Jones-Williams

14 / Beryllium in Body Tissues and Fluids / 161

William Jones-Williams

15 / Differential Diagnosis of Chronic Beryllium Disease / 167

Milton D. Rossman

16 / Treatment and Prognosis of Chronic Beryllium Disease / 177

Lawrence H. Repscher

...

SECTION VII : MEDICAL SURVEILLANCE

17 / Medical Examination Programs / 185

Thomas N. Markham

18 / Pulmonary Function Testing / 193

Thomas N. Markham

19 / Management of Workers with Abnormal Findings / 201

Thomas N. Markham

...

SECTION VIII : ENVIRONMENTAL ASSESSMENT WITH
CONTROL

20 / Air Sampling / 211

Beverly S. Cohen

21 / Analytical Techniques / 225

Raymond K. Hertz and Paul C. Kempchinsky

22 / Industrial Hygiene / 233

Philip R. Wilson

23 / Assessment of Risk Potential / 263

Otto P. Preuss

...

SECTION IX : REGULATORY AND MEDICOLEGAL ASPECTS

24 / Air Standards / 277

Martin B. Powers

25 / Water Regulations / 283

Richard C. Davis

26 / Solid Waste Regulations / 291

David W. Wolfe

27 / Workers' Compensation, Employers' Tort, and
Product Liability / 297

Janet L. Miller and John M. Newman, Jr.

Index / 303