Inorganic Hydrazine Derivatives. Synthesis, Properties and Applications

Description: Traditionally, interest in the chemistry of hydrazine and its derivatives has been focused on the development of propellants and explosives, but in recent years a wide variety of new applications have emerged in fields such as polymers, pharmaceuticals, water treatment, agriculture and medicine. Inorganic Hydrazine Derivatives: Synthesis, Properties and Applications presents a comprehensive review of the research carried out in this field during the last four decades.

Methods for synthesizing inorganic hydrazine derivatives and complexes are systematically presented, together with details of their characterization, spectra, thermal analysis, crystal structure, and applications. Strong emphasis is given to controlling the reactivity of hydrazine derivatives from detonation to deflagration to decomposition. The monograph also highlights current developments and applications of inorganic hydrazine derivatives, including the synthesis of nanostructured materials.

Topics covered include:

- An introduction to hydrazine and its inorganic derivatives
- Hydrazine salts
- Metal hydrazines
- Metal hydrazine carboxylates
- Hydrazinium metal complexes
- Applications of inorganic hydrazine derivatives

This applications-based handbook is a valuable resource for academics and industry professionals researching and developing hydrazine compounds, high energy materials, nanomaterials, and pharmaceuticals.

Contents:

List of Contributors xiii

Foreword xv

Preface xvii

Acknowledgements xxi

1 Hydrazine and Its Inorganic Derivatives 1
Tanu Mimani Rattan and K. C. Patil

1.1 Introduction 1

1.2 Inorganic Hydrazine Derivatives 10

1.3 Characterization of Inorganic Hydrazine Derivatives 28

1.4 Applications of Inorganic Hydrazine Derivatives 32

References 33

2 Hydrazine Salts 37
Singanahally T. Aruna and Kashinath C. Patil

2.1 Introduction 37

2.2 Salts of the Monovalent Cation (N2H5+ ) N2H5A 39

2.3 Salts of the Divalent Cation [(N2H5)2 2+ and N2H6 2+] 49
2.4 Salts of Monovalent (N2H5 + ) and Divalent Cations ((N2H5)2 2+, N2H6 2+) 53
2.5 Hydrazine Salts of Organic Acids 76
2.6 Summary 78
References 80
3 Metal Hydrazines 83
Dasaratharam Gajapathy and Tanu Mimani Rattan
3.1 Introduction 83
3.2 Metal Hydrazines     MX(N2H4)n, M=metal, X=SO4, SO3, N3, NCS, NO3, Clo4, RCOO, and so on, (n=1  3) 84
3.3 Reactivity of Metal Salt Hydrazines (from Detonation to Deflagration to Decomposition) 128
3.4 Summary 129
References 129
4 Metal Hydrazine Carboxylates 133
K. C. Patil and Tanu Mimani Rattan
4.1 Introduction 133
4.2 Metal Hydrazine Carboxylates     M(N2H3COO)2 134
4.3 Metal Hydrazine Carboxylate Hydrates     M (N2H3COO)n?xH2O; n=2, 3 136
4.4 Metal Hydrazine Carboxylate Hydrazines     M(N2H3COO)2?(N2H4)2 152
4.5 Hydrazinium Metal Hydrazine Carboxylate Hydrates     N2H5M(N2H3COO)3?H2O 155
4.6 Solid Solutions of Hydrazinium Metal Hydrazine Carboxylate Hydrates     N2H5M1=3(Co/Fe/ Mn)2=3(N2H3COO)3?H2O 160
4.7 Summary 168
References 168
5 Hydrazinium Metal Complexes 171
S. Govindrajan and Singanahally T. Aruna
5.1 Introduction 171
5.2 Hydrazinium Metal Sulfates 172
5.3 Hydrazinium Metal Oxalates 182
5.4 Hydrazinium Metal Halides 195
5.5 Hydrazinium Metal Thiocyanates     (N2H5)2M(NCS)4?2H2O,M= Co and Ni 208
5.6 Recent Studies on Hydrazinium Metal Complexes 214
5.7 Summary 216
References 216
6 Applications of Inorganic Hydrazine Derivatives 219
K. C. Patil and Tanu Mimani Rattan
6.1 Introduction 219
6.2 Applications of Hydrazine Salts 220
6.3 Energetic Materials 229
6.4 Combustible Metal Hydrazine Complexes 234
6.5 Miscellaneous Applications 245
References 249
Index 253

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