

Contents

<i>Preface to First Edition</i>	7
<i>Preface to Second Edition</i>	9
<i>Acknowledgments</i>	11
1 The historical development of plastics materials	1
2 The chemical nature of plastics	14
3 States of aggregation in polymers	33
4 Relation of structure to thermal and mechanical properties	45
5 Relation of structure to chemical properties	60
6 Relation of structure to electrical and optical properties	86
7 Polyethylene	98
8 Polyolefins other than polyethylene, and diene rubbers	133
9 Vinyl chloride polymers	161
10 Fluorine-containing polymers	208
11 Poly(vinyl acetate) and its derivatives	224
12 Acrylic plastics	234
13 Plastics based on styrene	252
14 Miscellaneous ethenoid thermoplastics	283
15 Polyamides and related materials	295
16 Polyacetals and related materials	321
17 Polycarbonates	341
18 Cellulose plastics	361
19 Phenolic resins	384
20 Aminoplastics	412
21 Polyester resins	436
22 Epoxide resins	457
23 Polyurethanes	490
24 Furan resins	511
25 Silicones and inorganic polymers	515
26 Miscellaneous plastics materials	546
27 Polyaryl ethers including polysulphones and p.p.o	570
<i>Index</i>	579