

1. Record Nr.	UNINA9910877273603321
Titolo	Carbonated soft drinks : formulation and manufacture // edited by David P. Steen and Philip R. Ashurst
Pubbl/distr/stampa	Oxford, : Blackwell, 2006
ISBN	1-280-74857-5 9786610748570 0-470-76333-7 0-470-99603-X 1-4051-7170-7
Descrizione fisica	1 online resource (374 p.)
Altri autori (Persone)	SteenDavid P AshurstP. R
Disciplina	663.62
Soggetti	Soft drinks Carbonated beverages
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Carbonated Soft Drinks: Formulation and Manufacture; Contents; List of Contributors; Preface; 1 Introduction; 1.1 Early history; 1.2 The growth of carbonates - production; 1.3 Technological development; 1.3.1 Carbon dioxide; 1.3.2 Sweeteners; 1.3.3 Flavours and colours; 1.3.4 Packaging; 1.4 Recent technological development; 1.5 The growth of carbonates - consumption; 1.6 Changing public perception and future challenges; Acknowledgements; Bibliography; 2 Water treatment; 2.1 Introduction; 2.2 Water quality; 2.3 Town mains water; 2.4 Boreholes; 2.5 How to achieve the desired water quality 2.6 Sand filtration 2.7 Coagulation; 2.8 Alkalinity reduction; 2.9 Membrane filtration; 2.10 Chlorination and carbon filtration; 2.11 Iron removal; 2.12 Nitrate removal; 2.13 Polishing filters; 2.14 Ultraviolet systems; 2.15 Ozone technology; 2.16 De-aeration; 2.17 Factory water distribution systems; 2.18 Factory water systems; References; 3 Ingredients and formulation of carbonated soft drinks Barry Taylor; 3.1 Introduction; 3.2 Factors influencing development of the industry; 3.3 The move towards standardisation; 3.4 The constituents of a soft drink;

3.5 Water; 3.5.1 Requirements  
3.5.2 Quality of fresh water  
3.5.3 Water hardness; 3.5.4 Water treatment; 3.5.5 Water impurities and their effect; 3.5.5.1 Suspended particles; 3.5.5.2 Organic matter; 3.5.5.3 High alkalinity; 3.5.5.4 Nitrates; 3.6 Saccharides and high-intensity sweeteners; 3.6.1 Bulk sweeteners; 3.6.2 Intense sweeteners; 3.7 Carbon dioxide; 3.8 Acidulants; 3.8.1 Citric acid; 3.8.2 Tartaric acid; 3.8.3 Phosphoric acid; 3.8.4 Lactic acid; 3.8.5 Acetic acid; 3.8.6 Malic acid; 3.8.7 Fumaric acid; 3.8.8 Ascorbic acid; 3.9 Flavourings; 3.9.1 Flavourings and legislation; 3.9.2 Flavourings in application  
3.9.3 Water-miscible flavourings  
3.9.3.1 Flavouring mixtures; 3.9.3.2 Flavouring essence; 3.9.3.3 Flavouring extract; 3.9.4 Water-dispersible flavourings; 3.9.4.1 Brominated vegetable oil (BVO) emulsions; 3.10 Colours; 3.11 Preservatives; 3.11.1 Micro-organisms and beverages; 3.11.2 Sulphur dioxide; 3.11.3 Benzoic acid and benzoates; 3.11.4 Sorbic acid and sorbates; 3.12 More functional ingredients; 3.12.1 Stabilisers; 3.12.2 Saponins; 3.12.3 Antioxidants; 3.12.4 Calcium disodium EDTA; 3.13 Retrospective investigation of a soft drink; 3.14 Food safety; 3.15 Future trends; Bibliography  
4 Syrup preparation and syrup room operations  
4.1 Introduction; 4.2 Syrup composition; 4.3 Syrup rooms and proportioning systems; 4.4 The modern syrup room; 4.5 Instrumentation; 4.6 Sugar; 4.6.1 Sugar dissolving; 4.6.2 Liquid sugar storage; 4.7 Pre-mixes; 4.8 Pasteurisation; 4.8.1 Tunnel pasteurisation; 4.8.2 Flash pasteurisation; 4.9 Clean-in-place systems; 4.10 Process plant hygiene requirements; 4.11 Syrup room building design; 4.12 Future developments; 5 Carbon dioxide, carbonation and the principles of filling technology; 5.1 Introduction; 5.2 Carbon dioxide  
5.3 Production of carbon dioxide

---

## Sommario/riassunto

The market for carbonated beverages has grown dramatically over recent years in most countries, and this growth has required changes in the way factories are run. Like other food products, soft drinks are required to be produced under stringent hygiene conditions. Filling technology has progressed rapidly to meet the needs of manufacturers and consumers alike. Packaging choices have changed and there have been improvements in closure design. This book provides an overview of carbonated soft drinks production in the early part of the twenty first century, presenting the latest in

---