

{The Barrack Family today, running the company their father Des founded in 1972}



'Solutions, Chemistry, Service'

Since 1972, Castle Chemicals has built its reputation on the manufacture and supply of innovative, value-adding products, systems and service.

We are proudly Australian owned and operated.

Over forty years' experience in the brewing industry has taught us that your passion for brewing and our passion for chemistry are not so different.

**Excellence.** You want a high-quality, unique beer that stands out among the crowd. We manufacture innovative, high-performance cleaning solutions to complement your brewing operations.

**Efficiency.** You want to grow your brewery. Our solutions will reduce your cleaning time and associated costs so you can grow.

**Wellbeing.** You want safety. We want to reduce chemical and sanitation risks to keep your team and your customers free from harm.

## From raw material to bottling, trust Castle to protect your brew.

## **Protect your brew with Castle**

Learn more about our commitment to your quality



### CASTLE CHEMICALS COMMITMENT

Since 1972, Castle Chemicals has built its reputation on the manufacture and supply of innovative, value-added products, systems and services.

ISO 9001, Quality Management Systems status became part of our culture in 1994. We have used this system approach to business to drive continual improvement in product development, quality and process traceability.

A simple business strategy developed in 1972 by the late Des Barrack, the founder, still sets the standard for Castle Chemicals into the future. "We work hard to earn the loyalty of our customers by providing innovative quality products that get the job done, along with experience, service and training that is carefully designed to meet our customers needs."









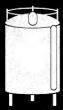
# Trust Castle with every facet of your **brew**.



Integrated Cleaning and Sanitising procedures



Acid and Alkaline CIP



Proorietary surface cleaners (Beer stone removal)



**Conveyor Lubricants** 





Chemical awareness and best practice training



**Environmentally-friendly** alternatives





Hygiene and PPE



Waste water solutions



Bacteria and Wild Yeast are not your friend. They can (and will) contaminate your brew, causing flavor-defection, 'hazy' beer, films, bad odours and acids, all while competing with the production strain for vital nutrients.

#### **Bacteria**

- Competes with controlled yeast for vital nutrients
- Causes flavor defection
- Grows swiftly in wort and beer

### Wild Yeast (i.e. any yeast not deliberately used)

- Can affect numerous aspects of your brew
- Not killed by acid washing
- If your pitching/cropping yeast comes into contact with air, contamination can occur

### Know your **enemy.**

Hygiene and sanitation are your best defense against contamination. Generally speaking, no bacterial strain can survive in a beer with normal pH, carbonation, alcohol content or bitterness, yet spoilage still occurs. Eliminate this risk with Castle's proven cleaning and sanitation procedure.

BACTERIA	TRAITS	RESULTS
Acetic Acid Bacteria	Produces acetic acid (vinegar) from ethanol	Spoilage
Common Brewers Bacteria	Found in wort (not usually in beer, unless high pH)	Spoliage; flavour defection
Lactic Acid Bacteria	Highly tolerant to hop extracts, high alcohol and low pH	Spoilage
Pectinatus and Megasphaera	Produces acetic acid	Flavour defection; turbidity
Zymomonas	Present in many ale breweries	Spoilage

